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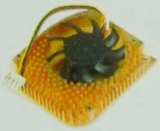
VGA CHIPSET COOLER 12VDC



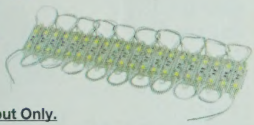
MFG: Thermaltake
P/N: A-1553-2 (OEM Version)
Voltage: 12VDC
Current: .25A
CFM: 10.6
Noise: 21db
Natural Hard Copper, finned heatsink with internal Fan. Designed to cool Tt-G4-VGA or similar graphic chipsets. Stall sensor output.

L: 3-5/8" **W:** 1-5/16" **T:** 1/2" **WT:** .3

STOCK #	DESC.	1EA
31838-FN	Copper VGA Cooler/Fan 12V	$3.95

HIGH OUTPUT LED MODULES

MORE PG 58

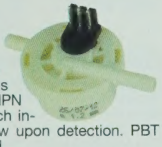


12V, +-.5V DC input Only.

20module string of White LED light engines featuring: 2 high lumen LEDs/module. 120 deg. beam angle. 3" between Modules. White plastic case, Peel-n-stick backer, clear epoxy potting. CE /RoHS
Current: .8A (40mA)/module) Color Temp:~5000 to 6500 36 Lumens/Module
Module:L.: 2-3/8" **W:** 5/8" **T:** 3/8"
L.: 86" **WT:** .25

STOCK #	DESC.	1EA
31366-OP	20 White 36 lm Light Modules	$14.95

FLOW SENSOR



UsedDIGMESA FHKSC Turbine Flow sensor for vending systems that use vibratory water pumps. NPN Normally Open transistor switch internal 1.2K Pull-up. Output low upon detection. PBT Plastic Case, NSF/CE Approved
Power: 4-20VDC
Output: Square wave, 20mA max Sink, 2016 Pulse/liter
Detection Range: .1-.57 L/min.
Pressure Range:-14 to +4.35 PSI
Internal orifice: 1.2mm
Fittings: hose bib, 5mm I/D tubing
Connections: Pancon156MLSS header Pins (.156" pitch)
L: 3" O/A **W:** 1-5/8" O/A **H:** 1-1/2"m **WT:** .04

STOCK #	DESC.	1EA
31430-HD	Digmesa Flow Sensor	$4.95

AC LINE POWERED 3W LED DRIVER

MORE @ MPJA.COM

Input: 85-265VAC 50-60Hz
Output: 3V-13VDC @ 300mA +- 10%
Specifications/Features: Mini Switching LED constant current LED driver for driving one 3W or three -four 1W LEDs. 3" AC leads, 4" DC Leads with 2 Pin connector with mating pig tail. CE Listed
Indoor use only Not for use with Dimmers.
L: 1-1/2" **W:** 1" **H:** 13/16" O/A **WT:** .02

STOCK #	DESC.	1EA
31536-PS	12VDC 3W LED Driver	$1.95

CABLE/WIRE TRACER

JDSU model KP101 Cable Tracer set with Probe & Tone generator. Generator features: Constant Tone level over life of battery, Auto OFF, Single/multi tone selection andHi/Lo tone level Mode, MOD jack for easy connection to test leads.
Probe features: Non-conductive, inductive tip, Adj. volume level, for noisy work areas.
Both use 9V batteries. Includes: Manuals, Soft carry pouch, batteries, 12in test leads with angled Telco type alligator clips & a 6in. 6 cond. MOD cable.

WT: 1.1

STOCK #	DESC.	1EA
31866-TE	Cable Tracer	$49.95

12VDC @ 3A SUPPLY

MORE PG 16-22

MFG: CONDOR
P/N: SA-123A0P
Input: 100-240VAC 50-60Hz
Output: 12VDC @ 3A
Specifications/Features: Regulated, switching power adapter. Non-polarized 2 Blade input, 6ft. output cord with a 10 mm long X 5.5mm/2.1mm coaxial connector Center Positive. UL/us/canada/CE Listed.
L: 2-3/4" **W:** 1-5/8" **T:** 1-1/2" **WT:** .36

STOCK #	DESC.	1EA
31830-PS	12VDC, 3A Condor Adapter	$7.95

MINI SPEAKER

Quality Micro speaker permanently mounted in a 32mm² X 28mm ABS plastic box. 3in. leads with a 0.1in. pitch micro connector out the back.
Rated: 8ohms +-15%
Frequency range: 200-20KHz.
Resonant Frequency: ~240Hz
Power: 2W RMS
SPL: ~78 +-3dB @1W & .5m
Rubber edged Aluminized Mylar cone with copper coil.
SQ: 1-1/4" **T:** 1" **WT:** .09

STOCK #	DESC.	1EA
31867-SP	2W Micro Speaker in Case	$3.95

SOLDERING STATION

General purpose solder station for the hobbyist. Adjustable from 5 to 50 Watt (800° F max) heat output for repairing PC boards to soldering transformer terminals. Station provides on-off switch, knob to control wattage, built-in stand, tip cleaning sponge & 1/32" point tip. 115 VAC line.

Base **L:** 5-5/8" X **W:** 4-9/16" X **T:** 3-5/8" **WT:** 1.8

STOCK #	DESC.	1EA	10+EA
15860-TL	Solder Station	$14.95	$13.95
15861-TL	Replacement handle	$4.95	$4.49

UPGRADE UNO MICRO CONTROLLER

MORE PG 3,11

Improved Arduino UNO-R3® compatible
Full featured Arduino UNO-R3® compatible controller with several additional features: a low profile Mini USB connector (Overcomes the shorting out of some shield boards), a low profile heavy duty power jack with stress relief, Additional Headers for +5V & Gnd, A metric 4 pin header for connection to Grove & other Sensors, additional header for I/O pins. Accepts all Plug-in modules for Arduino controllers. Information & Freeware available through www.arduino.cc.en and others on-line
Processor: 16 MHz ATmega328
Power: 5VDC (Recommend 7-12VDC)
Digital I/O : 14 (with PWM available on 6)
Analog Input: 6
Memory: Flash: 32K-.5K for bootloader
SRAM: 2K
EEPROM: 1K
Ports: ALL Arduino I/O Pins
I2C 6 pin header
4 X1 Grove 4 Pin Metric
USB port: Type Mini B
Power Port: 5.5mm X 2.1mm Jack
.1in. Female headers for direct connection to functions
.1in. Male headers for additional +5V, Gnd and I/O Pins
L: 3" O/A **W:** 2-1/8" **H:** 3/8" **WT:** .07

STOCK #	DESC.	1EA
31140-MP	UNO Compatable Controller	$17.50

USB CHARGER MONITOR

Charge monitor Cell phone, tablet, Pad, as well as mice, external drives etc. that plug into a computer USB Port or wall charger with USB connector. Single USB Type A Male plug on 4" cable for input. 2 Output USB Female Type A ports. Current displayed is total for both Ports
Input Voltage: 3.2~10V Charger/Port dependant
Display 3 Digit Red LED, .39" characters
Alternates between V & Current approx. every 4 sec
Current Available: >3A, Charger Dependant
Port I: Universal Port with Data transfer & charging. For use with original device chargers. Supports Apple IPad, IPhones & Samsung S4 High current chargers
PortII: Charging Port only no Data transfer. Special for Apple IPad, IPhones & Samsung S4 High Current Chargers with 2.1A or more. For use with original and replacement high current USB device chargers.
L: 3-1/4" **W:** 1" **T:** 9/16" **WT:** .06

STOCK #	DESC.	1EA
31563-ME	USB Cell Charger/Monitor	$8.95

CV/CC POWER SUPPLY

MORE PG 21

Non Isolated, adjustable DC/DC Buck (Step Down) Converter, Driver, Regulator with adjustable Constant Voltage out or adjustable Constant Current output for charging batteries or driving LEDs
Input: 5-35VDC Output: 1.5-30VDC
Input/Output Differential: 2V min.
Rated Current: 3A (10Watt limit without Heatsink)
Current limit: adj. 0-3A sets Max current
Charge Adj. : sets the threshold of toggle the Charg/Full Charge LEDs
Regulation: 1%
L: 2" **W:** 15/16" **T:** 5/8" **WT:** .06

STOCK #	DESC.	1EA
31562-PS	Adj. Volt & Current Supply	$4.95

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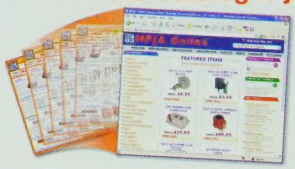
This Catalog is just a SAMPLING of what www.mpja.com has to Offer!



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- Access to Datasheets (where available)

DUAL 0-30VDC @ 3A BENCH SUPPLY

P/N: 9623
Input: 110 VAC 60Hz
Outputs: #1: 0-30VDC @ 0-3A
#2: 0-30VDC @ 0-3A **#3:** 5VDC @ 3A fixed
Specifications/Features: Dual Constant Voltage or Current supply with 4 LED meters that displays Volts & Amps. Selectable Independent, Series or Parallel operation of Adj. supplies (0-60V/3A or 0-30V/6A).
Line Reg.: <0.01%+-3mV(CV) <0.01%+-6mA (CC)
Load Reg.: <0.01%+- 2mv (CV) <0.01%+- 6mA (CC)
RMS ripple: 20mVp/p (CV) 50mAp/p (CC)
Front panel output Binding Posts.Metal case & rubber feet. Internal Temp. controlled fan
W: 10-1/4" **D:** 12-1/4 **H:** 6-3/8" **Ship WT:** 17

STOCK #	DESC.	1EA
9623-PS	Dual 0-30V/3A Adj. Supply	$139.95

0-18VDC @ 3A BENCH SUPPLY

P/N: 9600
Input: 110 VAC 60Hz
Output: 0-18VDC @ 0-3A
Constant Voltage or Current
Specifications/Features: True Constant Current (Can a short) Enclosed Linear bench supply with dual LCD displays for output Volts & Amps. .01%+3mV Line / .02%+3mV Load regulation, <1mV RMS ripple. Front binding posts. Metal case & rubber feet. Internal Temp. controlled fan
L: 9-1/2" **W:** 3-5/8" **H:** 6" **WT:** 8.6

STOCK #	DESC.	1EA	5+EA
9600-PS	0-18V/3A Adj. Supply	$59.95	$52.95

0-30VDC/5A BENCH SUPPLY

Input: 110 VAC 60Hz
Output: 0-30VDC @ 0-5A
Constant Voltage or Current
Specifications/Features: True Constant Current (Can drive a short). Enclosed Linear bench supply with dual LED displays for output Volts & Amps. .01% +3mV Line /.02%+3mV Load regulation, <1mV RMS ripple. Front binding posts. Internal Temp. controlled fan.
L: 11-1/4" **W:** 5-3/16" **H:** 6-1/4" **WT:** 14

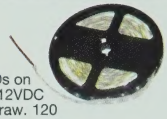
STOCK #	DESC.	1EA	5+EA
9603-PS	0-30V/5A Bench Supply	$110.00	$95.00

0-30VDC @ 10A BENCH SUPPLY

Input: 110 VAC 60Hz
Output: 0-30VDC @ 0-10A
Constant Voltage or Current
Specifications/Features:
True Constant Current (Can drive a short) Enclosed Linear bench supply with dual LED displays for output Volts & Amps. .01% +3mV Line /.05%+3mV Load regulation, <1.5mV RMS ripple. Front binding posts.
L: 11-1/4" **W:** 10-1/2" **H:** 6-1/2" **WT:** 28

STOCK #	DESC.	1EA
9604-PS	0-30V/10A Adj. Supply	$169.00

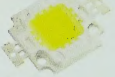
5M WHITE LED STRIP



5m long, flexible strip of LEDs on 17mm C/C (300 Total LEDs). 12VDC operation 0.4A max current draw. 120 deg. view angle. 3in. leads on one end. Can be cut every 3 LEDs (2in.)
Color: Cool White: 6500-7500K
Individual LED Intensity: 800mcd
Luminous Flux/1m: 270 lumens min.
Peel-N-Stick Backer
INDOOR ONLY
L.: 5m **W:** 8mm **T:** 2mm **WT:** .12

STOCK #	DESC.	1SPOOL
31192-OP	5m White LED Flex Strip	$9.95

1000 LUMEN WHITE LED



2800-3500 warm white High Brightness 10W LED.
Max forward current 900mA continuous,
9-10VDC Forward voltage drop.
140deg. View angle.
5V max reverse Voltage.
20mm sq. X3.5mm SURFACE MOUNT PACKAGE REQUIRES HEATSINK AND CURRENT LIMITING.
5mm X 6mm Beam leads
SQ: 20mm **H:** 3.5mm **WT:** .009

STOCK #	DESC.	1EA
31183-OP	1000lm SMD White LED	$2.95

HIGH OUTPUT LED MODULES

12V, +-.5V DC input Only.
20module string of White LED light engines featuring: 2 high lumen LEDs/module. 120 deg. beam angle. 3" between Modules
Current: .8A (40mA)/module) Color Temp:~5000 to 6500
36 Lumens/Module
White plastic case, Peel-n-stick backer, clear epoxy potting. CE /RoHS
Module:L.: 2-3/8" **W:** 5/8" **T:** 3/8"
L.: 86" **WT:** .25

STOCK #	DESC.	1EA
31366-OP	20 White 36 lm Light Modules	$14.95

RGB LED STRIP SPECIAL

RGB STRIP, CONTROLLER & POWER SUPPLY
5m, PVC encapsulated, flexible strip of Tri-color LEDs on 34mm C/C (150 Total LEDs). 120 deg. View angle. 3in. color coded leads with a .1in. header socket on one end. Can be cut every 3 LEDs (100mm) Peel-N-Stick Backer.
Remote Controlled Mini Driver module plugs directly into the RGB LED strip. 5 functions 1: Flash-blinking rotation of multi colors 2: Strobe- White (RGB) Fast fade up/down. 3: Fade- Slow rotation through 15 color combinations. 4: Smooth- Fast Rotation or Red, Green & Blue. 5: Static-non flash/fade of selected 1 of 16 colors.
12VDC @ 2.5A adapter Power supply with cord
WT: 1.3

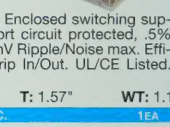
STOCK #	DESC.	1+EA
31541-OP	RGB Strip & Accessories	$19.95

48V @ .3A SUPPLY

MFG: HENGFU
P/N: HF15W-SPL-48
Input: 85-264VAC 47-63Hz
Output: 48VDC @ 300mA
Specifications/Features:
Open switching supply. Over voltage and short circuit protected, .5% Line/load regulation, 200mV Ripple/Noise max. Efficiency: 77%. Header Pins In/Out. UL/canada/us/CE Listed. RoHS Compliant
L: 4.0" **W:** 1.82" **H:** 1.0" **WT:** .2

STOCK #	PART #	1EA
18441-PS	Hengfu 48V/0.3 A Supply	$15.99

24V @ 1.8A SUPPLY



MFG: HENGFU
P/N: HF40W-SL-24
Input: 85-264VAC 47-63Hz
Output: 24VDC @ 1.8A
Specifications/Features: Enclosed switching supply. Over voltage and short circuit protected, .5% Line/load regulation, 100mV Ripple/Noise max. Efficiency: 78%. Terminal strip In/Out. UL/CE Listed. RoHS Compliant
L: 5.08" **W:** 3.86" **T:** 1.57" **WT:** 1.1

STOCK #	DESC.	1EA
16003-PS	Hengfu 24V/1.8 A Supply	$16.00

5V @ 20A SUPPLY

MFG: HENGFU
P/N: HF100W-SF-5
Input: 85-132/170-264VAC Switch Select, 47-63Hz
Output: 5VDC @ 20A
Specifications/Features: Enclosed switching supply. Over voltage and short circuit protected, .5% Line/load regulation, 100mV Ripple/Noise max. Terminal strip In/Out. UL/CE Listed. RoHS Compliant
L: 7.83" **W:** 3.86" **T:** 1.54" **WT:** 1.5

STOCK #	DESC.	1EA
16011-PS	Hengfu 5V/20 A Supply	$26.50

12V @ 12.5A SUPPLY

MFG: HENGFU
P/N: HF150W-SF-12
Input: 88-132/176-264VAC Switch Select, 47-63Hz
Output: 12VDC @ 12.5A
Specifications/Features: Enclosed switching supply. Over voltage and short circuit protected, .5% Line/load regulation, 120mV Ripple/Noise max. Terminal strip In/Out. UL/CE Listed. RoHS Compliant
L: 7.83" **W:** 4.33" **T:** 1.97" **WT:** 1.6

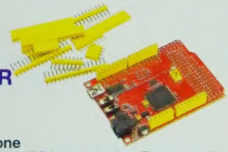
STOCK #	DESC.	1EA
16020-PS	Hengfu 12V/12.5 A Supply	$26.85

SEEDUINO V3.0 CONTROLLER

Duemilanove Clone
Full featured SEEDuino V3.0* controller. Based on the Duemilanove's schematic. 100% compatable to existing program, shield & IDEs, pin layout and dimensions. Accepts all Plug-in modules for Arduino controller. The controllers are one of the most widely used microcontrollers for experimenters, hobbists, robotists etc. Information & Freeware available through, forums, www.arduino.cc.en, www.seeedstudio.com & others on-line.
Processor: 16 MHz ATmega328P
Power: 5VDC/3.3V (Recommend 7-12VDC)
Digital I/O : 14 with PWM available on 6
Analog Input: 8 (2 usedfor I2C communication)
Memory: Flash: 32K-.5K for bootloader
SRAM: 2K
EEPROM: 1K
.1in. female headers for direct connection to functions
USB port: Type Mini B female
Power Port: 5.5mm X 2.1mm Jack
L: 2-3/4" O/A **W:** 2-1/8" **H:** 1/2" **WT:** .1

STOCK #	DESC.	1EA
30421-MP	Seeeduino V3.0 Atmega Controller	$23.50

SEEDUINO MEGA CONTROLLER



Compact MEGA Clone
Full featured SEEDuino MEGA® controller. Based on the Arduino MEGA. Compatable with most existing Duemilanove & Dieci program, shield & IDEs The Mega is major step up in processing power. The Arduinos are the most widely used microcontrollers for experimenters, hobbists, robotists etc. Information & Freeware available through, forums, www.arduino.cc.en, www.seeedstudio.com & others on-line.
Processor: 16 MHz ATmega2560
Power: 5VDC/3.3V (Recommend 7-12VDC)
Digital I/O : 70 (with PWM available on 14)
Analog Input: 16 (2 usedfor I2C communication)
UART Port: 3
Memory: Flash: 128K-.5K for bootloader
SRAM: 8K
EEPROM: 4K
.1in. female headers for direct connection to functions
USB port: Type Mini B female
Power Port: 5.5mm X 2.5mm Jack
L: 2-7/8" O/A **W:** 2-1/8" **H:** 1/2" **WT:** .1

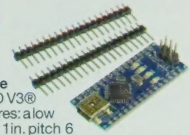
STOCK #	DESC.	1EA
30422-MP	Seeeuino MEGA Controller	$44.00

ADK CONTROLLER BOARD

Documentation Available at: www.seeedstudio.com
The ADK microcontroller provides the solution for the easist Android development. Seeeduino ADK Main Board supports Android devices V1.5 using MicroBridge V2.3.4 & above with Google Open Accessories API (ADK). Works like a Arduino Mega 2560 with built in USB Host Shield and can be connected to any USB device but Users will have to develop or locate their own drivers.
Power: 6-18VDC Via a micro USB connector.
5 & 3.3V regulators built in.
Supports 3 party shields
Ext. Power: 5.5/2.1mm Coaxial Female connector
I/O : USB 2.0 Port:Type A female
Micro USB: to Host Computer
16 Analog 56 Digital 14 PWM Outputs
4 UART Serial Ports 1 I2C Port & 1 SPI Port
Memory: 256K Flash
L: 3-1/2" **W:** 2-1/8" **H:** 5/8" **WT:** .14

STOCK #	DESC.	1+EA
30424-MP	ADK Microcontroller Board	$50.00

NANO V3 MICRO CONTROLLER



Arduino NANO compatible
Full featured Arduino NANO V3® compatible controller. Features: a low profile Mini USB connector: 1in. pitch 6 pin header for I2C connection. Auto Reset on Download, Information & Freeware available through www.arduino.cc.en and others on-line
Processor: 16 MHz ATmega328
Power: 7-12VDC (Operating 5VDC)
Digital I/O : 14 (with PWM available on 6)
Analog Input: 8
Memory: Flash: 32K-2K for bootloader
SRAM: 2K
EEPROM: 1K
Ports: Arduino I/O Pins
I2C 6 pin header
USB port: FTDI FT232RL Interface Chip
Type Mini B Connector
Power: 5V from USB, 6-20V Unregulated via Pin 30, +5 regulated via Pin 27, Auto select.
Manual Reset switch.
.1in. pitch holes for headers or direct connection to functions
L: 1.7" O/A **W:** 0.7" **H:** .45" O/A **WT:** .015

STOCK #	DESC.	1EA
31354-MP	NANO 3 Compatable Controller	$9.95

UNO MICRO CONTROLLER BOARD

Arduino UNO-R3® compatible Includes Power Supply
Full featured Arduino UNO-R3® compatible controller. Accepts all Plug-in modules for Arduino controller. The UNO is one of the most widely used microcontrollers for experimenters, hobbyists, robotists etc. Information & Freeware available through www.arduino.cc.en and others on-line.
Processor: 16 MHz ATmega328
Power: 5VDC (Recommend 7-12VDC)
Digital I/O : 14 (with PWM available on 6)
Analog Input: 6
Memory: Flash: 32K-.5K for bootloader
SRAM: 2K
EEPROM: 1K
.1in. female headers for direct connection to functions
USB port: Type B female
Power Port: 5.5mm X 2.1mm Jack
L: 3" O/A **W:** 2-1/8" **H:** 3/8" **WT:** 07

STOCK #	DESC.	1EA
30297-MP	UNO Compatable Controller	$19.95

MEGA R3 CONTROLLER

MEGA2560 Clone
Full featured MEGA® controller. Based on the Arduino MEGA. Compatable with most existing Duemilanove & Dieci program, shield & IDEs The Mega is major step up in processing power. The Arduinos are the most widely used microcontrollers for experimenters, hobbists, robotists etc. Information & Freeware available through, forums, www.arduino.cc.en, & others on-line.
Processor: 16 MHz ATmega2560
Power: 5VDC (Recommend 7-12VDC)
Digital I/O : 54 (with PWM available on 14)
Analog Input: 16 (2 usedfor I2C communication)
UART Port: 4
Memory: Flash: 256K-8K for bootloader
SRAM: 8K
EEPROM: 4K
.1in. female headers for direct connection to functions
USB port: Type Mini B female
Power Port: 5.5mm X 2.1mm Jack
L: 4-1/4" O/A **W:** 2-1/8" **H:** 1/2" **WT:** .1

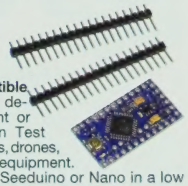
STOCK #	DESC.	1EA
31055-MP	MEGA2560 Controller	$27.95

UPGRADE UNO MICRO CONTROLLER

[Improved Arduino UNO-R3® compatible]
Full featured Arduino UNO-R3® compatible controller with several additional features: a low profile Mini USB connector (Overcomes the shorting out of some shield boards), a low profile heavy duty power jack with stress relief, Additional Headers for +5V & Gnd, A metric 4 pin header for connection to Grove & other Sensors, additional header for I/O pins. Accepts all Plug-in modules for Arduino controllers. Information & Freeware available through www.arduino.cc.en and others on-line
Processor: 16 MHz ATmega328
Power: 5VDC (Recommend 7-12VDC)
Digital I/O : 14 (with PWM available on 6)
Analog Input: 6
Memory: Flash: 32K-.5K for bootloader
SRAM: 2K
EEPROM: 1K
Ports: ALL Arduino I/O Pins
I2C 6 pin header
4 X1 Grove 4 Pin Metric
USB port: Type Mini B
Power Port: 5.5mm X 2.1mm Jack
.1in. Female headers for direct connection to functions
.1in. Male headers for additional +5V, Gnd and I/O Pins
L: 3" O/A **W:** 2-1/8" **H:** 3/8" **WT:** .07

STOCK #	DESC.	1EA
31140-MP	UNO Compatable Controller	$17.50

UPGRADE PRO-MINI MICRO CONTROLLER



Arduino PRO MINI Compatible
The Arduino ProMini was designed for Semi-Permanent or Permanent applications in Test Equipment, Machine controls, drones, disposible & experimental equipment. Same power as the UNO, Seeduino or Nano in a low cost and small footprint. Ideal for free standing reprogrammable sensors. Designed for experienced Users. 1st. time Users should take advantage of the Arduino Nano to gain skills. Information & Freeware available through www. arduino.cc.en and others on-line. Uses the 16MHz Bootloader, requires a FTDI cable or the ProMini Programmer
Features:
Processor: 16 MHz ATmega328
Power: 7-12VDC On-Board 5V Regulator (Operating 5VDC)
Digital I/O : 14 (with PWM available on 6)
Analog Input: 6
Memory: Flash: 32K (-2K for bootloader)
SRAM: 2K
EEPROM: 1K
Ports: Arduino I/O Pins 6 Pins for direct wiring to off Board USB connector (Not Supplied)
Manual Reset Button
.1in. pitch holes for headers (Supplied) or direct connection to functions
L: 1.3" O/A **W:** 0.7" **H:** .15" O/A **WT:** .012

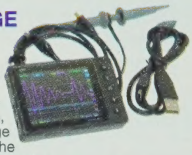
STOCK #	DESC.	1EA
31355-MP	PRO MINI Compatable Controller	$4.95

OPTO INTERRUPTER SENSOR

Arduino Photo-Interupter Sensor Module
Nifty little board using a Opto-Interrupter. Wide slot sensor ideal for item counts, lever operations, safety switch etc. On board LM393 Comparator for a reliable output.
POWER: 3.3-6VDC (5VDC nom)
OUTPUT: 6mA min @ 5V Current Sink when Obstructed LED On when Obstructed
Connector: 3 pin male header (.025sq X .1 pitch)
Sensor Gap: .235" Wide X .325" deep gap
L: 1" **H:** 9/16" **T:** .9/16" **WT:** .02

STOCK #	DESC.	1EA
31577-MP	Opto-Interrupter Shield	$2.95

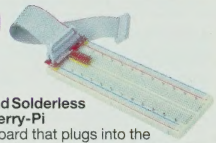
DIGITAL STORAGE OSCILLOSCOPE



Arduino Nano V3 DS201 Pro Digital Scope
No toy here; this is a serious, compact & easy to use, pocket 32 Bit Digital Storage Oscilloscope based on the ARM-M3 Arduino Nano Controller.
Features:
10Hz to ~1MHz square wave generator.
Horz. & Vert. Markers
320X240 Color 2.8in LCD display
Analog Bandwidth: 0-200KHz
Sample Rate: 1MSamples/Sec @ 12 bits
Memory Depth: 4096 points
Horiz. Time base: 1uS/div. to 10sec./div.
Vert. Sensitivity: 10mV/div to 10V/div. (1X Probe)
0.5V/div to 100Vdiv. (10X Probe)
Coupling: DC
Trigger: 6 modes: Off, Auto, Norm, 1 Shot, Scan, Fit
Adjustable Lead or Falling Edge
Input: 80V DC+ACp/p Max (1X Probe)
Power: 3.7V/500mAH LiPo battery
USB port for Software upgrades & Battery charging.
Includes: Probe (1x/10X), soft cloth case, USB Cable
L: 3-5/8" **W:** 2-3/8" **D:** 1/2" **WT:** .3

STOCK #	DESC.	1EA
31250-TE	Arduino Digital Scope DS201	$129.95
31249-TE	Arduino Scope spare Probe	$16.95

RASPBERRY-PI GPIO BREADBOARD



V2.2 Breakout Board and Solderless Breadboard for Raspberry-Pi
Small, "T" shaped PC Board that plugs into the Solderless Breadboard and connects to your Pi by a 7in long, 26pin ribbon cable. Extends those hard to connect to I/O lines to the 830 tie point solderless breadboard to provide for easy access to the I/O lines and Power on the Raspberry controller. Peel-n-stick backer on Breadboard. LED indicator for 5V power "ON"
"T" Board: L: 1-1/2" **W:** 2" **H:** 3/4" **WT:** .3

STOCK #	DESC.	1EA
30318-MP	Raspberry-Pi GPIO Extender	$19.95

GROVE ADK DASH KIT

Android Device Development
The ADK Kit provides modular solution for the easist ADK development. Boosts Android devices with functions including Servos, RFID, Range finders, enviromental sensors. Kit features the Seeeduino ADK Main Board that supports Android devices V1.5 using MicroBridge V2.3.4 & above with Google Open Accessories API (ADK). Works like a Arduino Mega 2560 with built in USB Host Shield.
Main board:
Power: 6-18VDC Via a micro USB connector.
5 & 3.3V regulators built in.
Supports 3 party shields
Ext. Power: JST Connector Male
I/O : USB 2.0 Port:Type A female
Micro USB: to Host Computer
16 Analog 56 Digital 14 PWM Outputs
4 UART Serial Ports 1 I2C Port & 1 SPI Port
Dash Kit Includes:
ADK Main Board and a Grove Mega Shield
Elements: 3 pcs. Chainable LED
Thumb Joystick
PIR motion detector
Temperature /humidity sensor
Ultrasonic Ranger
RFID board
2 pcs. Relay board
Cables: Micro USB, 10pcs. Universal 4Wire, 2pcs, Servo
Misc: 1 Mini Servo Motor.
WT: .7

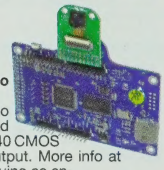
STOCK #	DESC.	1+EA
30427-MP	Grove ADK Dash kit	$100.00

RASPBERRY-PI CAMERA MODULE

Raspberry-Pi 5M Pixel Camera for Model A or B
High-definition OmniVision CMOS camera for the Pi controller. Uses the dedicated CSI camera connector on the top of the Pi. Built-in IR filter. Automatic White Ballance, Exposure Control & Black Level calibration. Snapshot or Video operation. Many programmable features. Supported by the latest version of Raspbian (Preferred O/S).
Power: (From Pi) 1.5V core onboard regulator
Resolution: 2592X1944 Still
Pixel Size: 1.4um X 1.4um
Supports :1080P@30fps, 720P@60fps,
640X480P@60/90fps.
Lens mount: M12X0.5
Lens: 3.2mm/f2.0 FOV: Horiz: 63.7/Vert: 70deg.
4 corner mtg. holes.
Includes 10in. flat cable for connection to Raspberry-Pi
L: 1-13/32" **W:** 1-13/32" **WT:** .08

STOCK #	DESC.	1EA
31178-MP	Raspberry Pi Camera	$29.95

CAMERA MODULE



2M Pixal Camera for Arduino UNO/MEGA
ArduCAM-F RevB is an Arduino based open source camera Shield including a 2 Mega Pixal OV2540 CMOS camera module with JPEG output. More info at www.arducam.com & www.arduino.cc.en.
Power: 5 & 3.3VDC from Controller
Shield I/O are 3.3 & 5V Tolerant
Storage: SD/TF Card socket (Card not included)
support BMP/JPG
3MB FIFO for Frame buffering
Raw RGB Capture resolution: 640X600,
Supports 2 mp (1600 X 1200 JPEG image capture & storage
GPIO expansion support
SPI Slave interface
Trigger In & Out for event recording.
L: 3-7/8" **W:** 2-7/8" **H:** 5/8 O/A **WT:** .08

STOCK #	DESC.	1EA
31065-MP	ArduCAM Camera Shield	$39.95

CAMERA MODULE/ CS LENS

5M Pixel Camera for Raspberry-Pi Model A or B
Give your robot sight with this High-definition OmniVision 1/4" CMOS camera with CS mount 6mm lens for the Pi controller. Uses the dedicated CSI camera connector on the top of the Pi. Built-in IR filter. Automatic White Ballance, Exposure Control & Black Level calibration. Snapshot or Video operation. Many programmable features. Supported by the latest version of Raspbian (Preferred O/S).
Sensor: OV5647
Power: (From Pi) 1.5V core onboard regulator
Resolution: 2592X1944 Still
Pixel Size: 1.4um X 1.4um
Supports :1080P@30fps, 720P@60fps,
640X480P@60/90fps.
Lens mount: CS
Lens:6mm/F1.4
4 corner mtg. holes
Includes 5in. flat cable for connection to Raspberry-Pi
SQ.: 1-7/16" **H:** 1-3/8" **WT:** .1

STOCK #	DESC.	1EA
31497-MP	Pi Camera with CS Lens	$34.95

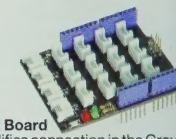
"ARDUINO" " PI"
more Items on www.mpja.com

RASPBERRY-PI UCONTROLLER

Includes: Power Supply RCA video, Network & USB Cables
Full featured Raspberry-PI is small card sized computer that attaches to your TV & a keyboard. Featuring Broadcom's BCM2835 SOC with 700mHz ARM processor, VideoCore IV Graphics and 512 MB RAM.
Requires you to download to SD Card your OS
OS: Debian Linux, Raspbian, Arch Linux ARM, etc.
For complete details, instructions and downloads
See. www.raspberrypi.org
Processor: 700MHz + ARM1176JZF
Power: 5VDC 700mA Via a micro USB connector.
I/O : 2 USB 2.0 Ports
1 Ethernet 10/100 Port
1 HDMI Port
1 Composite Video RCA Jack
1 3.5MM Audio Jack
1 Camera Ribbon connector (CSI)
1 LCD Display Ribbon Connector (DSI)
26 Pin header for SPI, & GPIO, UART, Power
Storage: SD Card Slot (4GB min needed)
SD card stores Operating System
USB port: Type B female
Power Port: micro USB
L: 3" O/A **W:** 2-1/2" **H:** 3/4" **WT:** .7

STOCK #	DESC.	1EA
30315-MP	Raspberry-Pi Computer Starter	$59.95

BASE SHIELD BOARD



Arduino Grove Break-out Board
The Base shield board simplifies connection in the Grove environment. Arduino pins are brought to 4 Pin JST sockets. Each JST provides 2 Signal Pins, A Ground Pin & a =Vcc. You have 4 available I2C connectors, 4 Analog connectors, 7 Digital connectors and 1 UART connector. The UART connector comprises Arduino's Digital0 & Digital1 while D2 -D8 Port duplicates ports in a staggered manner: D2=Digital2 & Digital3/D3= Digital3 & Digital4/ .../D8=Digital8 & Digital9. The Analog Pins are treated the same A0=Analog 0 & Analog 1/ A1=Analog1 & Analog2 etc. The SPI Header is feed through only as there are no Grove modules that use it. Standardized and stackable shield board compatible with the Arduino I/O Pins.
L: 2-11/16" **W:** 5/8" **WT:** .1

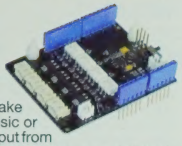
STOCK #	DESC.	1EA
30444-MP	Seeeduino Grove Base Shield	$9.90

USB/TTL MINI BOARD

USB 2.0 Mini module connects host computer (Windows Linux) to a Arduino or other micro controllers. On chip UART, USB Controller, Full Duplex asynchronous serial device to a USB host. Upgrade RS232 to USB. Supports Windows® up through XP, linux 2.4 & up.
Chip: Silicon Labs CP2102
Power: 5, 3.3VDC
Baud Rate: 300BPs to 1.0MBps
Connections: 6 Pin (.1") header for TXD, RXD, RST, 3.3V, 5V & Gnd.
Holes for 2X3 (.1 pitch) additional headers for RI, DCO,DTR, DSR, RTS & CTS
USB 2.0 Type A Male
LED for Power.
Freeware available through www. arduino.cc.en and others.
L: 1-17/32" O/A **W:** 5/8 **HT:** 1/2" **WT:** .02

STOCK #	DESC.	1EA
31575-MP	Mini USB/RS-232 Interface	$4.95

EL SHIELD BOARD

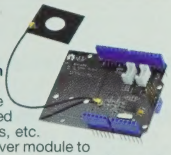


Arduino Electroluminescent Driver Module
Program your Aduino to make E/L tubing "Dance" with music or other sources. Use PWM output from Arduino to drive 4 channels of Opto-Couplers & TRIACs. Standardized and stackable shield board compatable with the Arduino I/O Pins. Requires external 5V to 110V DC/DC converter. Drives up to 15M of E/L. JST2.0 headers for connection to inverter.

L: 2-11/16" **W:** 2-1/8" **WT:** .12

STOCK #	DESC.	1EA
30431-MP	Seeeduino EL Card Shield	$27.50

NFC SHIELD BOARD

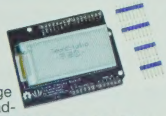


Arduino Near Field Comm Module
NFC is a system of short range (5cm-2-3/8") data exchange used at gas stations, security doors, etc. Shield uses a PN532 Transceiver module to handle contactless exchange at 13.56MHz. Supports ISO14443 A & B Standards. Shield will read and write a 13.56mhz wand or tag or you can setup point to point (P2P) data exchange by using 2 NFC Shields. Standardized and stackable shield board compatable with the Arduino I/O Pins. Uses the SPI port to communicate leaving the Arduino I/O available. Includes Grove UART and I2C ports.

L: 2-11/16" **W:** 2-1/8" **WT:** .1

STOCK #	DESC.	1EA
30429-MP	Seeeduino NFC Card Shield V2	$14.90

E-INK SHIELD BOARD

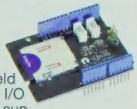


Arduino E-Paper Module
Small version of the those Page White screens used in e-readers. Super low power AMEPD (Active Matrix Electrophoretic Display), retains display with power off. Driver chip supports character of 175 languages. Display size: 2.25" X 1.125" O/A. Resolution: 172 X 72. Standardized and stackable shield board compatible with the Arduino I/O Pins. Uses the SPI port to communicate.
Some soldering & Assembly Required

L: 2-11/16" **W:** 2-1/8" **WT:** .08

STOCK #	DESC.	1EA
30434-MP	Seeeduino E-INK Card Shield	$50.90

SD SHIELD BOARD

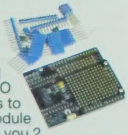


Arduino Storage Module
Standardized and stackable shield board compatable with the Arduino I/O Pins. Need more storage? Module supports SD <16G,SDHC <16G and uHD<2G. Fully compatable with existing Arduino SD card software library. Uses the SPI port to communicate leaving the Arduino I/O available. Includes Grove UART & I2C ports.

L: 2-11/16" **W:** 2-1/8" **WT:** .1

STOCK #	DESC.	1EA
30428-MP	Seeeduino SD Card Shield V4	$14.90

XBEE SHIELD BOARD



Arduino BEE Interface Module
Standardized and stackable shield board compatable with the Arduino I/O Pins. Stack any BEE series modules to build your own wireless network. Module can provide level conversion to give you 2 way conversion between high & low I/O levels. On-board breadboard grid for your own circuits.

L: 2-11/16" **W:** 2-1/8" **WT:** .06

STOCK #	DESC.	1EA
30430-MP	Seeeduino XBEE Shield	$10.90

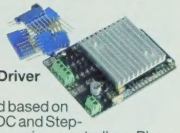
WI-FI SHIELD BOARD

Arduino Networking Module
Wi-Fi Shield for Arduino controllers is designed around the RN171 Module to give 802.11b/g capability. Supports TCP,UDP and FTP. Secure authentication WEP-128,WPA-PSK,, WPA2-PSK. Built in Networking apps: DHCP client, ARP, ICMP ping, HTTP, UDP, TCP. Standardized and stackable shield board compatible with the Arduino I/O Pins. Uses the Tx & Rx pins on the controller. Includes Grove UART and I2C ports.
Some soldering & Assembly Required

L: 2-11/16" **W:** 2-1/8" **WT:** .1

STOCK #	DESC.	1EA
30435-MP	Seeeduino WiFi Shield	$60.90

MOTOR SHIELD BOARD

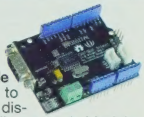


Arduino Low profile Motor Driver Module V2.0
Full featured motor drive board based on the L298 IC. Connects Servo, DC and Stepper motors to a Arduino or other micro controllers. Plugs directly onto your Arduino. Arduino powered (Via USB) or terminal strip for external.
Power: 5VDC Logic. External Motor: 6-15V
Outputs: Terminal Strip for: "H" bridge @ 1.6A/bridge
Drives: 1 Bi or Uni-Polar Step Motor, 4/5/6/8 wire or 2 DC motors.
Heatsink can reach 100C under full load, additional cooling may be required!
Some soldering & Assembly Required

L: 2-11/16" **W:** 2-1/8" **WT:** .1

STOCK #	DESC.	1EA
30438-MP	Seeeduino Lo Profile Motor Shield	$20.50

CAN-BUS SHIELD BOARD

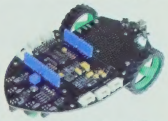


Arduino CAN Bus Interface Module
CAN Bus is industrial bus used to comunicate with equipment at long distances with high reliability and medium speed. Module implements CAN V2.0B at up to 1mb/sec. Comunicates with Arduino over SPI interface. LEDs indicates status of board. Terminal strip for CAD pair. DB-9Male for CAN Pair, Gnd, & 12V. Standardized and stackable shield board compatable with the Arduino I/O Pins. Includes Grove UART and I2C ports.

L: 2-11/16" **W:** 2-1/8" **WT:** .1

STOCK #	DESC.	1EA
30442-MP	Seeeduino CAN-BUS Shield	$24.50

SHIELD BOT ROBOT BASE

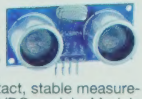


Arduino Beginner Robot Platform
Fully Stackable Adruino Shield module that changes your Adruino Seeeduino into a beginner robot. On-board line following sensors, packed full of expansion ports to create a base for robotics. Plug & Play set up so you can get started in a short time, Features 2 DC motors, 5 reflective I/R line trackers, 900mAh LiPo Battery Pac, 6 Grove expansion Ports, USB Mini B female port

L: 6-5/8" **W:** 3-11/16" **WT:** .7

STOCK #	DESC.	1EA
30433-MP	Seeeduino Robot Shield	$70.90

ULTRASONIC RANGE MODULE



Ultrasonic ranging module used to determine the distance to a target.
Features high accuracy, non-contact, stable measurements in a simple 4 connection +5VDC module. Module "Pings" a target when triggered then outputs a logic pulse proportional to the distance.

L: 1-3/4" **W:** 7/8" **HT:** 5/8" **WT:** .02

STOCK #	DESC.	1EA
19605-UT	Ultrasonic Range Module	$3.31

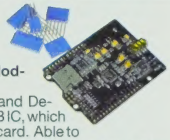
SEEDUINO STALKER WIRELESS SENSOR NODE

Full featured wireless sensor node based on the Seeeduino Controller.
Program with "Arduino Processing Language" (Requires UartSBee Module sold seperately). It's modular structure and onboard hardware make it easy to log time stamped date at a periodic rate. On-board uSD socket, Real Time Clock with socket for backup battery, Bee Connector and LiPo battery charger.
Arduino Sensor modules are connected through the standard I/O Pins
Can operate as a standalone Seeeduino.
Processor: 16 MHz ATmega328P
Power: 5V from UartSBee module USB Port
Digital I/O: 14 with PWM available on 6
Analog Input: 8 (2 usedfor I2C communication)
Memory: Flash: 32K-.5K for bootloader
SRAM: 2K
EEPROM: 1K
.1in. female headers for direct connection to functions
Power Port:JST Headet for battery or via Uart Module
BEE modules compatable with Stalker:
WiFi Bee, BluetoothBee, XBee/XBee ZB, GPSBee, RFBee

L: 3-5/8" O/A **W:** 2-7/16" **H:** 1/2" **WT:** .1

STOCK #	DESC.	1EA
30423-MP	Seeeduino Stalker 2.3	$40.00

MUSIC SHIELD BOARD

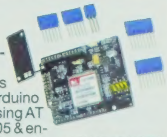


Arduino MIDI Instrument Module V2.0
Module designed to Encode and Decode Music. Based on VS1053B IC, which enables it to play files from SD card. Able to play MIDI notes by modifying the board. Supported files: MP3, WMA, WAV, AAC, MIDI, Ogg Vorbis. On-board uSD card socket (Max card 2Mb) & 3.5mm 16/32 ohm headphone jack. Multi function Switch for control of Volume & song forward/back. MIDI interface breakout with low latency. Standardized and stackable shield board compatible with the Arduino I/O Pins.
Short time recording with Arduino/Seeeduino MEGA Only.
Some soldering & Assembly Required

L: 2-11/16" **W:** 2-1/8" **WT:** .1

STOCK #	DESC.	1EA
30439-MP	Seeeduino Music Shield	$28.50

GPRS SHIELD BOARD

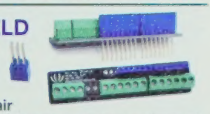


Arduino Cellular Communications Module
Give your Arduino controllers cellular connectivity. Use the Arduino to dial a number, text friends using AT command set GSM 07.07/07.05 & enhanced SINCOM. Quad band support: 850/900/1800/1900mHz. Supports TCP/UDP protocols. Jack for headset, SIM card socket and coin cell socket (Headset, SIM card & CR1220 3V Coin cell Not included.) Standardized and stackable shield board compatible with the Arduino I/O Pins. Requires Unlocked SIM.
Some soldering & Assembly Required

L: 2-11/16" **W:** 2-1/8" **WT:** .12

STOCK #	DESC.	1EA
30436-MP	Seeeduino GPRS Cell Shield	$60.90

TERMINAL SHIELD BOARD

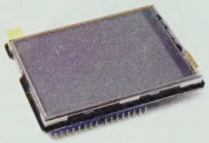


Arduino Break out to Terminal Strip Board Pair
Real handy pair of boards that you snap apart and mount as "Wings" on your Arduino/Seeeduino board to access the controllers header connections. Boards mount outward so you can still stack all those Shield modules. Includes a SPI header for spacing & feedthrough.

L: 2-11/16" **W:** 5/8" **WT:** .1

STOCK #	DESC.	1EA
30441-MP	Seeeduino Screw Shield	$8.50

TFT SHIELD BOARD

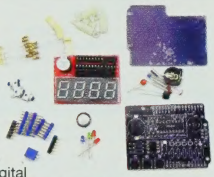


Arduino 2.8in. TFT Touch Screen Module
Top off your stack by Adding Text and graphics to your Arduino with this Multifunction Shield. Contains a full color TFT backlit Display, a resistive Touch Screen and a SD Card socket. Display resolution: 320X240, Colors: 65k. 4 wire resistive touch screen. Uses 4 Analog pins for Touch input, SPI for communication. Standardized and stackable shield board compatible with the Arduino I/O Pins. No external power supply needed.

L: 2-11/16" **W:** 2-1/8" **WT:** .12

STOCK #	DESC.	1EA
30437-MP	Seeeduino TFT Touch Shield	$55.90

TICK-TOCK SHIELD

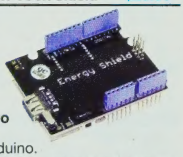


Real Time Clock for Arduino
Simple starter board is the Tick-Tock Shield Board. Perfect way to begin your Arduino experience. Project is to build a "Geek" style Digital alarm clock. Once assembled this board takes you through several programming examples ranging from easy to difficult.
Board is compatible with the Arduino I/O Pins but does not feed through signals.
NOTE: Requires assembly using soldering & mechanical skills and includes all necessary components.

L: 2-11/16" **W:** 2-1/8" **WT:** .18

STOCK #	DESC.	1EA
30432-MP	Seeeduino Tick-Tock Shield	$20.90

ENERGY SHIELD BOARD



Arduino Power Source & LiPo Battery Charger
Mixed power board for Arduino.
Provides Input/charger JST port for a 3.7V LiPo battery (not supplied), JST input Port for 4-5-5.5V Solar Panel and a USB Type A female for extracting power from Host Computer. SPI Header for Pass through.Standardized and stackable shield board compatible with the Arduino I/O Pins.

L: 2-11/16" **W:** 5/8" **WT:** .1

STOCK #	DESC.	1EA
30443-MP	Seeeduino Energy Shield	$30.90

RELAY SHIELD BOARD

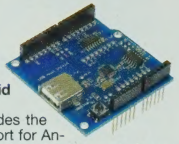
Quad Relay Shield V2.0 for Arduino
Shield has 4 high quality relays providing independant SPDT switching. LED indicates status of each relay. Contacts Rated: 35V Max @ 8A Max. Terminal strips for relay contacts. Standardized and stackable shield board compatible with the Arduino I/O Pins.
[Caution:] Place 2 layers of electrical tape over USB connector on Arduino Board to prevent contact.

L: 2-11/16" **W:** 2-1/8" **WT:** .2

STOCK #	DESC.	1EA
30440-MP	Seeeduino Quad Relay Shield	$21.00

"ARDUINO" more Items on www.mpja.com

ANDROID USB SHIELD

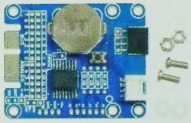


USB Host Shield for Android Based
The ADK USB Shield provides the solution for the easist support for Android Arduino controller and Android based phones. Android phone devices need Android 2.3.4 version while tablets need Android 3.1. Provides APK package and compiled source files compatable with Arduino UNO 328, Diecimila/Duemilanove 328, MEGA 2560 (recommended), MEGA1280.
Power: 5V/3.3DC from Microcontroller
I/O : USB 2.0 Port:Type A female
1 Full shield I/O pass through from controller
1 SPI Port

L: 2-1/8" **W:** 2-1/8" **H:** 7/8" **WT:** .04

STOCK #	DESC.	1+EA
31057 MP	ADK USB Host Shield Board	$27.95

REAL TIME CLOCK



Arduino Accurate Clock Shield
Clock uses the DS3231 IC from Maxim
Standardized and stackable shield board compatible with the Arduino I/O Pins. Uses the Tx & Rx pins on the controller. Uses I2Cfor host communications <25MHz.
Power: 3-5VDC/ 200uA active, 900nA(timekeep)
Accuracy: 2ppm 0C-40C (~1min/Yr)

L: 2-5/16" **W:** 1-13/16" **WT:** .04

STOCK #	DESC.	1EA
31147-MP	Accurate Realtime Clock	$16.25

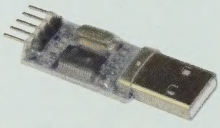
WIFI SHIELD

Arduino WiShield V2.0 WiFi Shield
Wi-Fi Shield for Arduino controllers is designed around the Microchip MRF24WBOMA Module to give 802.11b capability. Supports both BSS & IBSS wireless networks. Connects to Secure authentication WEP-64 &128, WPA/WPA2-PSK. 1 & 2 Mbps throughput speeds. Standardized and stackable shield board compatible with the Arduino I/O Pins. Uses the Tx & Rx pins on the controller. Uses SPI for host communications <25MHz.

L: 1-7/8" **W:** 2-1/8" **WT:** .04

STOCK #	DESC.	1EA
31056-MP	WiFi Shield	$74.95

USB/TTL CONVERTER BOARD



USB-STC-ISP Module provides Support for USB 1.1/2.0 to TTL devices. Full Duplex asynchronous serial device to a USB host. Allows you to upgrade firmware in routers, ADSL modems. Write to STC SCM, NXP SCM, NEC & renesas microcontrollers.
Supports Windows® up through 7 (No 98 or ME)
Chip: PL2303HX /HXA Bridge controller
Power: 5, 3.3VDC
Input: 6 Pin (.1") header for connection to TTL devices
Output: USB 2.0 Type A Male
LEDs for Power, Rx & Tx
Clear shrink wrap protects against shorting.
Drivers available at: www.prolific.com

L: 2" O/A **W:** 11/16" **WT:** .02

STOCK #	DESC.	1EA
31219-MP	uController USB Interface	$3.95

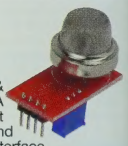
MEGA I/O SENSOR SHIELD V2.0

Mega Atmega 1280/2560 Compatible
Get more out of the MEGA with this Shield designed for easy connection of sensors to all 70 of the analog and digital pins. Each connector has separate +5 volts and ground contacts. Additionally 5 special purpose connectors are provided for ICSP port, APC220 wireless module, Bluetooth wireless module, SD card interface, Ultrasonic module. Power supplied from the MEGA or jumper selectable external source. Shield also includes Reset Button, Power LED, I/O pin D13 LED.
[Input/Output Connectors]
16 Analog 54 digital
1 for APC220 wireless module
1 for Bluetooth wireless module
1 for SD card interface module
1 ICPS Port
1 External +5 volt power terminal strip (Jumper Selectable)

L: 3-7/8" O/A **W:** 2-1/8" **H:** 3/4" **WT:** .1

STOCK #	DESC.	1EA
31060-MP	MEGA2560 Sensor Shield	$12.95

HYDROGEN GAS SENSOR

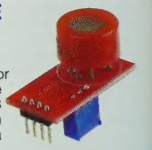


a state of the art MQ-2 Propane & Hydrogen sensor coupled with A simple adjustable comparator circuit using a LM393 IC. Detects LPG and Hyrrogen Gas in the air. Designed to interface to a Arduino or other micro controllers. Freeware available through www.arduino.cc.en and other web sites.
Power: 5VDC
Outputs: TTL Compatible Digital & Analog
4 Pin .1in Header pins for Power & Output
LED for Output status indication.
Board: 32mm X 18mm

WT: .02

STOCK #	DESC.	1EA
31043-MP	Microcontroller Propane Sensor	$9.95

CARBON MONOXIDE SENSOR

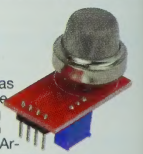


a state of the art MQ-7 CO sensor coupled with A simple adjustable comparator circuit using a LM393 IC. Detects Carbon Monoxide in the air. Designed to interface to a Arduino or other micro controllers. Freeware available through www.arduino.cc.en and other web sites.
Power: 5VDC & Bi-level AC: from Controller
Outputs: TTL Compatible Digital
4 Pin .1in Header pins for Power & Output
LEDs for 5V Power and Output status indication.
Board: 32mm X 18mm

WT: .02

STOCK #	DESC.	1EA
31041-MP	Microcontroller CO Sensor	$9.95

NATURAL GAS SENSOR



State of the art MQ-5 Natural gas &LPG sensor coupled with A simple adjustable comparator circuit using a LM393 IC. Detects Natural Gas in the air. Designed to interface to a Arduino or other micro controllers. Freeware available through www.arduino.cc.en and other web sites.
Power: 5VDC
Outputs: TTL Compatible Digital & Analog
4 Pin .1in Header pins for Power & Output
LED for Output status indication.
Board: 32mm X 18mm

WT: .02

STOCK #	DESC.	1EA
31042-MP	MiMicrocontroller NG Sensor	$12.95

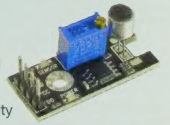
ETHERNET SHIELD

Stackable Ethernet Shield for UNO & MEGA
Compact LAN Shield using the Wiznet W5100 chip providing IP stack and capable of both TCP & UDP. Shield supplies up to 4 simultanious socket connections. SPI interface for communication to Arduino and or other micro controllers. Can be server or client. Micro SD card slot for file storage.
Note: the W5100 & SD card share the SPI bus, only one can be active. You must disable the one you are not using. Freeware available through www.arduino.cc.en and others. RJ jack mounted Green & Yellow LEDs
Power: 3.3/5VDC from microcontroller
Digital I/O : same as controller
Analog Input: same as controller
LEDs: 7 TX,TX,Coll,FullD,100M, Link & Power

L: 2-3/4" **W:** 2-1/8" **HT:** 1-1/16" O/A **WT:** .06

STOCK #	DESC.	1EA
31054-MP	Micro Controller Ethernet Shield	$19.95

SOUND SENSOR



Arduino Analog/Digital Sound Sensor
Arduino powered board with adjustable audio trigger sensitivity level using the LM393 IC.
LED for Power & an LED for Detection.
Power: 3.5-5.5VDC
Outputs: Analog: low level audio
Digital Low for detected sound above setting.
4 Pin I/O header.

L: 1-1/4" **W:** 9/16" **H:** 1/2" **WT:** .02

STOCK #	DESC.	1EA
31072-MP	Sound Sensor Board	$3.95

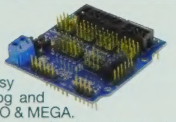
BUZZER MODULE

Compact buzzer module with transistor driver to protect I/O pins from overloading. Designed to interface to a Arduino or other micro controllers. Freeware available through www.arduino.cc.en and other websites
Power: 3.3-5VDC
Frequency: Single 3.1KHz tone
Soung Level: 80db
3 Pin Interface & Power
SPI single line data line. TTL compatiable
Set includes Board & 6in. Interconnect jumpers.

L: 2-3/16" **W:** 9/16" **H:** 1/2" **WT:** .09

STOCK #	DESC.	1EA
31063-MP	Microcontroller Buzzer Module	$1.95

SENSOR SHIELD



Arduino Sensor Shield V5.0
Sensor Shield llows quick, easy access to all 20 of the analog and digital pins on the Arduino UNO & MEGA.
Each sensor connector has separate +5 volts and ground contacts. Additionally 8 connectors are provided for special purpose modules Power supplied from the Arduino or a jumper selectable external power supply. Shield also includes Reset Button, Power LED, I/O pin D13 LED. All connectors have 2.54mm pin spacing.
I/O Ports:
6 Analog
14 digital
1 128X64 graphic LCD parallel
1 128X64 graphic LCD serial
1 APC220 wireless module
1 Bluetooth wireless module
1 SD card interface
1 Ultrasonic module
1 I2C serial port
1 RS232 serial port

L: 2-1/4" **W:** 2-1/4" **H:** 3/4" **WT:** .06

STOCK #	DESC.	1EA
31058-MP	Sensor Shield V5	$7.95

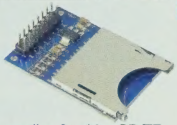
H-BRIDGE STEPMOTOR DRIVER

Dual Driver for Arduino & Microcontrollers
Designed around the L9110S IC, can drive 2 DC motors or 1 four wire 2 phase stepper. TTL logic control input. Freeware available through www.arduino.cc.en and others.
Power: 2.5-12VDC
Output: .8A cont. 1.5A Peak
Input: TTL logic levels
Connections: 6 Pin (.1") Input header for connection to power & uController
Output: Terminal strip for A A/BB motor
LED for Power.

WT: .01

STOCK #	DESC.	1EA
31162-MP	Dual H Motor Driver	$3.95

SD CARD DRIVER



SD Card Reader/Writer for Arduino ARM Controllers
Compact sensor sized board for reading & writing SD/TF memory modules. 2 X 8 header with .1in pitch (row 2 connected in parallel to Row 1). All SD SPI signals (CS, SCK, MISO, MOSI available on header for easy connection to all Arduino, Raspberry-Pi & others.
Power: 3.3 & 5V (onboard 3.3V regulator)
Information & Freeware available through www.arduino.cc.en and others on-line.

L: 2" **W:** 1-3/16" **HT:** 9/16" O/A **WT:** .02

STOCK #	DESC.	1+EA
31491-MP	SD Card Reader/Writer	$2.95

MICRO SD CARD DRIVER

Mini-Micro SD Card Reader/Writer for Arduino ARM Controllers
Compact sensor sized board for reading & writing Mini & Micro SD memory modules. 6 pin header with .1in pitch. All SD SPI signals (CS, SCK, MISO, MOSI) available on header for easy connection to all Arduino, Raspberry-Pi & others.
Power: 3.3V
Information & Freeware available through www.arduino.cc.en and others on-line.

L: 25/32" **W:** 11/16" **HT:** 1/2" O/A **WT:** .01

STOCK #	DESC.	1+EA
31570-MP	Micro SD Card Reader/Writer	$1.95

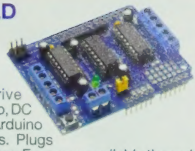
2 X 16 LCD SHIELD

LCD and keypad shield for Arduino
LCD Shield for UNO, MEGA & Duemilanove. LCD features: 16 character by 2 line LCD module (Hitachi 44780 compatible), dark blue back ground, white characters, White LED backlight and contrast. Shield has 5 control buttons for: Up, Down, Left, Right and Select. Buttons use only one analog ADC port input, saving pins for other uses. Additional features include LCD contrast adjust, Reset button, ICSP port and power LED. Solder pads available for access to +5v, Gnd, Rst, A1-A5 and digital D0, D1, D2, D3, D11, D12, D13.
Power: +5 volts @ 26mA (supplied by Arduino)
Character size 2.95mm X 5.15mm
Dot Size 0.55mm x 0.60mm
Overall size: L3.20in., W2.35in., H0.55in(excluding pins)
Power: +5 volts @ 26mA (supplied by Arduino)

L: 3-1/8" **W:** 2-1/4" **H:** 7/8 O/A **WT:** .12

STOCK #	DESC.	1EA
31059-MP	LCD Shield for Arduino	$11.95

MOTOR SHIELD BOARD

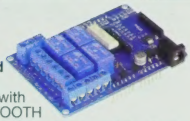


Full featured motor drive board for connecting Servo, DC and Stepper motors to a Arduino or other micro controllers. Plugs directly onto UNO controller. Freeware available through www.arduino.cc.en and others.
Power: 5VDC Logic. External Motor 4.5-15V
Input: (.1") headers for direct connection to Arduino
Outputs: .1" headers for 2 Hobby 5V Servos
Terminal Strips for: 4 L293D "H" bridge @ .6A/bridge
Drives: 2 Bi or Uni-Polar Step Motors, 4/5/6/8 wire or 4 DC motors.
Compatable with Mega 1280/2560,UNO,Duemilanova & Diecimila.

WT: .14

STOCK #	DESC.	1EA
30292-MP	uController "Motor Shield"	$10.95

SUPER SHIELD RELAY BOARD

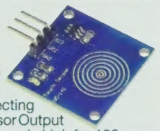


Quad Relay Super Shield V1.3 for Arduino
Super Shield smart module with interface for XBEE/BLUETOOTH BEE modules and 4 high quality relays providing independent SPDT switching. LED indicates status of each relay.
Power: 7-12VDC on-board 5.5X2.1mm coaxial jack
Contacts Rated: 1A, 250VAC, 3A/120VAC/24DC.
Terminal strips for relay contacts.
Standardized shield board compatible with the Arduino I/O Pins.
Digital ports 2,3,4 & 5 for relays, 0 & 1 for wireless modules
[Caution:] Place 2 layers of electrical tape over USB connector on Arduino Board to prevent inter board short

L: 3-1/8" **W:** 2-3/16" **WT:** .15

STOCK #	DESC.	1EA
31300-MP	Quad Relay Super Shield	$16.95

TOUCH SENSOR



Arduino Digital Touch Sensor Module
Arduino powered sensor for detecting finger touch. When touched; sensor Output switches to a High. Output will remain high for 100+seconds before resetting if touch is maintained.
Power: 2-5.5VDC
CMOS Output Transistor:
Voh: .8VDC, 0.6Vtyp. at Vcc=3V, Sink load of 8mA
Vol: .3V Source 4mA
3 Pin I/O header. Power LED

L: 15/16" **W:** 15/16" **WT:** .005

STOCK #	DESC.	1EA
31301-MP	Touch Sensor Board	$3.95

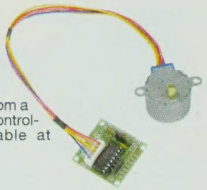
8 RELAY BOARD

8 SPDT Relay Module for Arduino
8 independent SPDT Relays designed to be driven by an Arduino or other micro controllers. Freeware available through www.arduino.cc.en & others.
LED indicators for each relay
All relays are Opto isolated.
Power: 5VDC@<30mA each.
Selectable independent or common Gnd. and/or +5V
Input: .1in. header with Vcc, Gnd, and an input pin for each relay.
Contacts: SPDT 10A @ 30VDC, 250VAC
Output: Terminal strips for contacts
4 corner mounting

L: 5-9/16" **W:** 2" **H:** 3/4" **WT:** .26

STOCK #	DESC.	1EA
31302-MP	Micro Controller 8 Channel Relay	$12.95

STEP MOTOR & DRIVER

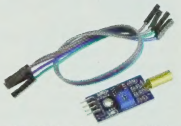


Designed to be driven from a Arduino or other micro controllers. Freeware available at arduino.cc.en
Power: 5-12VDC
Signal: TTL logic
Set Includes:
Driver Board utilizing the ULN 2003 IC. (www. ti.com)
28BYJ-48 Unipolar gearhead stepmotor: 5.625 Deg/step with 1/64 ratio yielding .0879deg/step. 500pps max rate, >350g-cm holding torque
Board. 40mm X 32mm with header pins.
Motor: 20mm long X 28mm Dia: 1-1/4" with 5mm dia. double "D" X 9mm brass shaft. 8" motor leads, 2 mounting ears on motor.

WT: .09

STOCK #	DESC.	1EA
30032-MS	Step Motor with Driver	$5.95

TILT SENSOR

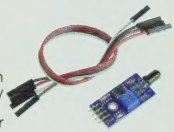


Arduino Tilt Sensor
Arduino powered board with adjustable trigger sensitivity level using the LM393 IC top eliminate False triggering. LED for Power & an LED for Tilt Detection.
Power: 3.3-5.5VDC
Approx Trip angle 45degees
Outputs: Analog: Direct Switch output
:Digital: Debounced Comparator Output.
4 Pin I/O header.
4pcs. 20cm Interconnect Jumpers.

L: 1-3/4" **W:** 9/16" **H:** 1/4" **WT:** .02

STOCK #	DESC.	1EA
31071-MP	Tilt Sensor Board	$3.95

FLAME SENSOR



Arduino I/R Flame Sensor
Arduino powered board with adjustable trigger sensitivity level using the LM393 IC.
LED for Power & an LED for flame Detection.
Detection Range: 760-1100nM (Low I/R)
Power: 3.3-5.5VDC
Outputs: Analog: low level dependent on I/R Source
:Digital Low for detected Flame/Heat above setting.
4 Pin I/O header.

L: 1-1/4" **W:** 9/16" **H:** 1/2" **WT:** .02

STOCK #	DESC.	1EA
31074-MP	Flame Sensor Board	$3.95

RELAY BOARDS

Relay boards designed to be driven a Arduino, PIC, AVR or other micro controllers. Freeware available through www.arduino.cc.en & others
LED indicatorsfor power & each input.
Opto isolated with a jumper to use a separate +5 supply for relays
Power: 5VDC@20mA per Relay
Input: .1in. header with Vcc, Gnd, and an input pin for each relay.
Contacts: SPDT 10A @ 28VDC,30VDC,125VAC,250VAC
Output: Terminal strips

WT: .03/.06/.12

STOCK #	DESC.	1EA
31356-MP	Micro Controller Single Relay	$2.95
31357-MP	Micro Controller Dual Relay	$3.95
31305-MP	Micro Controller 4 Relays	$7.95

X-Y JOYSTICK

Analog joystick for the Arduino and othermicrocontrollers. Contains two 10K potentiometers connected to the handle lever for X-Y movement and when the handle is pressed in the centered position, a momentary switch "Z" is closed. The Potentiometers are wired as voltage dividers between Gnd. & Vcc. The lever is spring loaded toreturn to center position at rest. Typical connections are X and Y to the AD converter and the momentary Z switch to a digital pin. The Z switch has a 1K pull up resistor and is active low output. Can be used with 3.3V and 5V microcontrollers. This unit has three Dupont 3 pin male header connectors (.025sq X .1 spacing) for each function which makes connecting to the Arduino Sensor Shield a snap. Ideal for steering robots, games, panning cameras, and RC model control. With LED power indicator and four mounting holes

L: 2-1/8" **W:** 1-3/4" **H:** 1-1/4" **WT:** .04

STOCK #	DESC.	1EA
31061-MP	Arduino X-Y Joystick with LED	$5.95

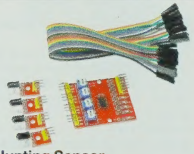
X-Y JOYSTICK

Analog joystick for the Arduino and othermicrocontrollers. Contains two 10K potentiometers connected to the handle lever for X-Y movement and when the handle is pressed in the centered position, a momentary switch "Z" is closed. The Potentiometers are wired as voltage dividers between Gnd. & Vcc. The lever is spring loaded to return to center position at rest. Connections to a microcontroller are X and Y to the AD converter and the momentary Z switch to a digital pin. The Z switch has a 10K pull up resistor and is active low output. Can be used with either 3.3V or 5V supplies. Single 5 pin male header connectors (.025sq X .1 spacing) for Output. Four corner mounting holes.

L: 1-3/8" + Pins **W:** 1-1/4" **H:** 1-1/4" **WT:** .02

STOCK #	DESC.	1EA
31064-MP	X-Y Joystick	$4.95

4CH. LINE SENSOR



Arduino 4 Channel Line Hunting Sensor
Arduino powered board with 4 adjustable sensitivity inputs for the 4 remote mount externai LED/Photo transistor Sensor boards. Included main Board, 4 Sensor Boards and 18pcs. 20cm Interconnect Jumpers.
Power: 3.2-5VDC A >1A
Outputs: 4 TTL Compatable
Detection Range: 1mm -60cm, Near the more stable

L: 1-1/2" **W:** 1-9/16" **H:** 1/2" **WT:** .06

STOCK #	DESC.	1EA
31068-MP	4 Channel Line Sensor	$14.95

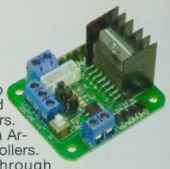
USB/UART BOARD

USB 2.0 module connects host computer (Windows Linux) to a Arduino or other micro controllers. Freeware available through www. arduino.cc.en and others.
Chip: CP2102
Power: 5, 3.3VDC
Baud Rate: 300BPs to 1.5MBps
Input: 6 Pin (.1") header for connection to uController/ Power
Output: USB 2.0 Type A Male
LED for Power.
NOTE: Not an interface for devices as camera, printer etc.

L: 1-3/4" O/A **W:** 11/16" **WT:** .02

STOCK #	DESC.	1EA
30286-MP	uController USB Interface	$5.95

STEP MOTOR DRIVER



Utilizes the L298 IC driver to power motors, solenoids and the larger NEMA 14-23 steppers. Designed to be driven from a Arduino or other micro controllers. Freeware available through www.arduino.cc.en
Drive Type: Dual "H"
Logic Power: 5VDC
Driver Power: 5-35VDC
Input Signal: TTL logic
Max Current: 2A/Phase (Max total power: 25W)
Onboard 5V regulator can be activated to supply Logic power when Driver Power input is between 7-35V
.1in Header pins for Logic input, Terminal strips for Motor leads & Power.
LEDs for 5V Power and Phase drive indication.
Board. 50mm X 44mm

WT: .06

STOCK #	DESC.	1EA
30281-MP	Micro Controller Power Driver	$8.95

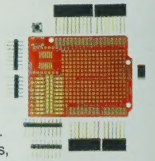
ETHERNET SENSOR

Compact LAN Module using the ENC28J60 chip with an SPI interface for Arduino or other micro controllers. Freeware available through www.arduino.cc.en and others
Power: 3.3VDC (5V Tolerant)
u Controller interface: 10 Pin header for power & control
LAN: RJ-45 Jack
RJ jack mounted Green & Yellow LEDs

L: 2-1/4" **W:** 1-5/16" **WT:** .02

STOCK #	DESC.	1EA
30284-MP	Micro ControllerEthernet Module	$7.95

BREADBOARD SHIELD KIT

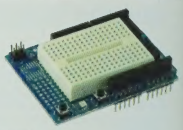


The prototyping shield makes it easy to make up your own custom circuits. Provides extra connections to all the Arduino I/O Pins, approx 190 uncomitted Plated thru holes, location for both through hole (.1pitch) & SMD IC (.05 pitch) IC's. Includes a Reset botton, I2C Header. Compatable with Mega 1280/2560 & UNO-R3

L: 2-11/16" **W:** 2-1/16" **WT:** .04

STOCK #	DESC.	1EA
30293-MP	Breadboard Shield Kit	$5.95

PROTOTYPING SHIELD BOARD



Arduino Solderless Breadboard
Prototype shield V-5 features:
.1" headers for direct connection to/from Arduino
.1" header sockets for stacking additional boards
Reset Switch,
Aux. SPST-NO switch,
2 LEDs
5V & Ground Busses
ICSP Com. Port
Peel & Stick breadboard with 170 tie points

L: 2-3/4" **W:** 2-1/8" **H:** 3/4" **WT:** .06

STOCK #	DESC.	1EA
30294-MP	Solderless Breadboard Shield	$8.95

"ARDUINO" more Items on www.mpja.com

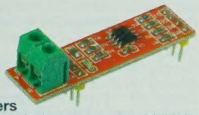
SERIAL 2 X 16 LCD

Serial LCD for Arduino
LCM1602 IIC V1 Serial Board LCD for UNO, MEGA & Duemilanove. The I2C/SPI communication with microcontroller does not take a Shield position, simple 4 wire connection. LCD features: 16 character by 2 line LCD module (Hitachi 44780 compatible), dark blue back ground, white characters and White LED backlighting. Power LED.
Power: +5 volts (supplied by Arduino)
Character size: 2.95mm X 5.15mm
Dot Size: 0.55mm x 0.60mm
I/O: 4 pin header 0.1in Pitch

L: 3-1/8" **W:** 1-7/16" **H:** 7/8 O/A **WT:** .1

STOCK #	DESC.	1EA
31164-MP	2X16 Serial LCD Arduino	$9.95

RS485 SERIAL BOARD



RS-485 Transceiver for Arduino & Microcontrollers
Complete TTL/RS485 interface designed around the MAX485 chip. Designed to connect RS485 single or multiple communicating units to Arduino or other equipment. All MAX485 Pins ar available on the 2 header connectors. Terminal strip for connecting the 485 cable. Freeware available through www.arduino.cc.en and others.
Power: 5VDC
Input: Dual 4 Pin (.1") header for connection to uController
Output: Terminal strip
LED for 5V Power.

WT: .01

STOCK #	DESC.	1EA
31161-MP	uController TTL/RS-485 Interface	$3.95

MOISTURE SENSOR

A simple adjustable comparator circuit using a LM393 IC to detect water continuity in soil. Designed to interface to a Arduino or other micro controllers. Freeware available through www.arduino.cc.en
Power: 3.3-5VDC
Input: 2 Pin header for connection to sensor board
Outputs: TTL Compatible Digital
Feed through of Analog Input
4 Pin .1in Header pins for Power & Outputs
LEDs for 5V Power and Output status indication.
Comparator Board: 30mm X 16mm
Sensor Board: 55mm X 20mm
Set includes Both Boards & 6in. Interconnect jumpers.

WT: .02

STOCK #	DESC.	1EA
30282-MP	Micro Controller Moisture Sensor	$6.95

RAIN SENSOR

A simple adjustable comparator circuit using a LM393 IC to detect water droplets on detector board. Designed to interface to a Arduino or other micro controllers. Freeware available through www.arduino.cc.en
Power: 3.3-5VDC
Input: 2 Pin header for connection to sensor board
Outputs: TTL Compatible Digital
Feed through of Analog Input
4 Pin .1in Header pins for Power & Outputs
LEDs for 5V Power and Output status indication.
Comparator Board: 30mm X 16mm
Sensor Board: 54mm X 40mm
Set includes Both Boards & 6in. Interconnect jumpers.

WT: .02

STOCK #	DESC.	1EA
30283-MP	Micro Controller Rain Sensor	$6.95

240 X 128 DISPLAY

MFG: HANTRONIX
P/M: HDM128GS24
Resolution: 240X128
Dot Size: .4 X .4mm
Dot Pitch: .45mm
Specifications/Features: 2.5" X 4.375" View area, Transflective type Dot Matrix display with white LED Backlight. Built in Toshiba T6963 controller. Requires single +5V supply. 20Pin right angle header for Data 8in leads for Backlight.

L: 6" **W:** 4-1/2" O/A **T:** 1/2" **WT:**.5

STOCK #	DESC.	1EA
31003-OP	240 X 128 LCD Display	$19.95

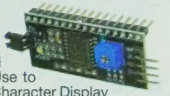
HUMIDITY SENSOR

A selfcontained Temperature & humidity sensor & board designed to interface to a Arduino or other micro controllers. Freeware available through www.arduino.cc.en
Data:40bit serial: 2X8bit Humidity + 2X8bit Temp. +8bit Checksum
Power: 3.3-5VDC
3 Pin Interface & Power
SPI single line data line. TTL compatiable
Temp: Range: 0-50°C
Humidity Range: 20-90% RH
Sensor Board: 35mm X 15mm
Set includes Board & 6in. Interconnect jumpers.

WT: .02

STOCK #	DESC.	1EA
30287-MP	Microcontroller Humidity Sensor	$5.95

SERIAL SPI/LCD DRIVER BOARD

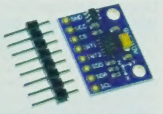


Complete interface designed around the PFC8574T chip. Use to connect a 2X16 or 4X20 LCD Character Display to a Arduino or other micro controllers. Freeware available through www.arduino.cc.en and others.
[SPI Address lines A0-A2 may be pre set from factory. add or remove solder bridges as needed]
Power: 5VDC
Input: 4 Pin (.1") header for connection to uController
Outputs: 16 TTL Compatible pins to LCD module
LED for 5V Power.

WT: .02

STOCK #	DESC.	1EA
30285-MP	uController SPI/LCD Interface	$3.95

3 AXIS ACCELEROMETER SENSOR



Add an Accelerometer to Arduino & Microcontrollers
Designed for the ADXL345 triple axis accelerometer, this board supplies raw 16bit 2's complement data to a microntroller through a SPI or I2C interface. Features Tap/ Double Tap and Free fall detection. Freeware available from arduino.cc.en, youtube & the many forums.
NOTE: Header requires soldering
Power: 3-5VDC 40uA operating.
Output: 3 or 4 Wire SPI or I2C
Range: Select +-2, +-4, +-8 or +-16G
Resolution: 13bit/4mG/LSB
Connections: 8 Pin (.1") Input header for connection to power & uController

WT: .01

STOCK #	DESC.	1EA
31163-MP	3Axis Accelerometer	$4.95

3 PIN SERVO EXTENSION CABLE

NON-POLARIZED Ribbon cable with 0.10" pitch, 3 position Socket connector on one end and 3 Pin Male connector on the other end. Socket accepts .025" round or square pins, Males are .025" Sq. Pins.

L: 50cm (19") **WT:** .01

STOCK #	DESC.	1EA
31498-CB	50CM Servo Extension Cable	$1.29

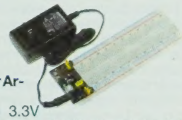
RFID READER SET

RFID kit for Arduino microcontrollers.
MIFARE RFID Reader/Writer set up that includes a MF522 reader Board, a S50 Plastic Card and a small KeyFOB.
Supports ISO14443A Transponder protocols and CRYPTO01 encryption algorithm. Open source software available at www.arduino.com and several other sites.
Module: Based on the MFRC522 IC
Frequency: 13.56MHz
Power: 3.3V @ 26mA Active ,<80uA Sleep mode
Read/Write Time: <2mS
Distance: <10cm
Data Transfer Read/Write: 424kbs
Interface: SPI
Module includes straight & right Angle Headers that you have to solder.
Size: 60L X 40W X 6mm Without header
Card: NFC Smart Card/Tag MIFARE S50, Blank card.
Memory: 1K EEPROM (768Available)
Comm. Speed: 106 Kbaud
Freq: 13.56MHz.
# of Writes: 100K
Size: 86 X 55 X .9mm
Compatible With most NFC supporting Android Devices.
KeyFOB: NFC MIFARE 1K ISO 14443A
Freq: 13.56MHz.
# of Writes: 100K
Waterproof ABS Case
Size:32W X 40L X 4mm
VISIT MPJA.COM FOR ADDITIONAL FOBs & CARDS

WT: .06

STOCK #	DESC.	1EA
31111-MP	RFID/NFC Reader Set	$11.95

POWERED BREADBOARD



Solderless prototyping for Arduino & Others
Breadboard with attached 3.3V & 5V power supplies. Features: 2 Distribution strips (200 pts), Breadboard panel (830Pts.), a +3.3VDC & +5VDC power supplyBoard. Max total load:700mA. Supply Board plugs into breadboard. Selectable 5V, 3.3V or No Bus voltage for both bus strips. Power On/Off switch on board. Input power from USB Port or 5.5/2.5mm power jack. 6.5-12VDC input range. Includes a 12V Plug supply.Panel cutout: 45.5 X 26.5mm

WT: .5

STOCK #	DESC.	1EA
30176-TE	Powered Breadboard	$9.95

MICRO SERVO MOTOR

Servo Motor for Arduino, Raspberry-Pi Robotics
Mini servo for robotics & modeling. Nylon gears for smooth quite operation. Rated: Op. Voltage 3.5-6VDC, Stall Torque: 1.2kg/cm @ 4.8V, 1.6kg/cm @ 6V, Speed: 300Deg./Sec (60/.12sec.), Dead Bandwidth: 5us. Futaba/JR connector on 9in. cable.

L: 23mm **W:** 12mm O/A **T:** 29mm **WT:** .02

STOCK #	DESC.	1EA
31002-MD	6V Micro Servo Motor	$5.95

ROBOTICS SERVO MOTOR

Servo Motor for Arduino, Raspberry-Pi Robotics
Heavy duty mini servo with metal gears for robotics. Rated: Op. Voltage 5-7.2VDC, Stall Torque: 7kg/cm @ 4.8V, 10+kg/cm @ 6V, Speed: 360Deg/Sec (60/.15sec.), Dead Bandwidth: 5us. 12in. cable with Futaba/JR connector.

L: 2-1/8" O/A **W:** 3/4" O/A **H:** 1-1/2" **WT:** .14

STOCK #	DESC.	1EA
31150-MP	6V Servo Motor for Robotics	$7.95

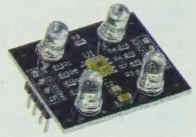
H-BRIDGE OPTO-ISOLATED DRIVER

Dual Driver for Arduino & Microcontrollers
Designed around the L293Driver IC with full signal isolation using TLP521 series Optocouplers. Board can drive 2 DC motors or 1 four wire 2 phase stepper. TTL logic control input. Freeware available through www. arduino.cc.en and others.
Isolation: 2500V RMS
Power: Logic 3.3-5V
Driver: 4.5-36VDC Jumper for single supply operation under 5.5V
Output: .8A cont. 1.2A Peak
Input: TTL logic levels
6 Pin .1in Pitch Header for Logic Power & Input
6 Pin .1in Pitch Header for Output & External Power selection
Terminal strip for A A/BB motor & Motor Power
LED for Power indication.

L: 2-1/16" **W:** 1-9/16" **H:** 1/2" **WT:** .03

STOCK #	DESC.	1EA
31597-MP	Isolated Bridge Power Driver	$8.95

COLOR DETECTOR

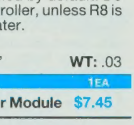


Arduino Color Recognition Sensor Module
Designed around 4 White LEDs and the TAOS TCS230 sensor IC. The four white LED's to provide a broad spectrum light source .The TCS230 has an 8 x 8 array of photodiodes with color filters (16 Red, 16 Blue, 16 Green, 16 Clear). A light to frequency converter generates a 50% duty cycle square wave on the output pin. Frequency is directly proportional to light intensity. Output scaling 100%, 20% and 2% allows for wide dynamic range of intensities. The color selects (S2, S3), frequency scale (S0, S1) and output are TTL logic level and can be connected directly to the micro controller. Basic readings are easy using the Arduino "pulsein" command. Take a reading for each color. The reading with narrowest pulse width or highest frequency is the major color. Using advanced ratio analysis almost any color could be recognized. Multiple uses by adding lenses, color filters, different light source.
Check out: www. arduino.cc.en and others.
Power: 2.7 – 5VDC
Current: >30mA @ 5V
Input: TTL Logic Levels
Sensor Bandwidth: ~ 400 – 950nm
Output: TTL Level Square Wave (50% Duty Cycle)
~2Hz max Dark/24KHz Max,
Intensity/Color Dependant SEE DATA SHEET
NOTE: The OE pin (Output Enable) is grounded through R8 (0ohm), making the module enabled by default. Do not connect the OE to the micro controller, unless R8 is removed or changed to 4.7K or greater.
Dual 4 Pin .1in Pitch Headers

L: 1-1/4" **W:** 15/16" **H:** 3/4" **WT:** .03

STOCK #	DESC.	1EA
31582-MP	Color Intensity Detector Module	$7.45

LIPO BATTERY CHECKER

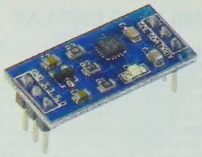


Mini Tester for R/C batteries. Designed to test 1-8 Cell LiPo, Li-Ion, LiMn & LiFe Packs. Scans each cell & displays the voltage then displays total Voltage of Pack. Alarm sounds when a cell is below programmable set point.
Character Height: 0.36in.
Input Range : .5-36Vmax
Input cell Range: .5-4.5V
Cell Alarm Set point: 2.7-3.8V
Resolution: .01V
9 Pin header (.025" sq X .1" spacing), – and 1 for each cell in pack up to 8

L: 1-1/2"O/A **W:** 1" **T:** 1/2" **WT:** .02

STOCK #	DESC.	1EA
31067-TE	LiPo Battery Monitor	$4.95

3 AXIS COMPASS

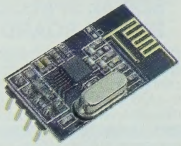


Arduino 3 Axis Digital Compass Module
A 3 axis (XYZ) digital compass/magnetometer using Honeywell's HMC5583L sensor. Can detect magnetic fields from +to - 8 Gauss, with milli-gauss resolution. As a compass, you can expect a 1-2 degree heading accuracy. Fast, up to 160 readings per second are possible. As a magnetometer can detect large masses of ferrous metals (iron), small magnets, electromagnetic fields, even currents in wires. Interface is standard I2C, the module has built-in pull up resistors on the SDA and SCL lines. On board 3.3 volt regulator allows use on 3.3 or 5 Volt micro controllers. Wide uses in navigation, robotics, RC models, science, even as a driveway automobile detector alarm. Information & Freeware available through www. arduino.cc.en and others on-line.
Power: 2.7 – 5.5VDC
Current: 100uA
Resolution < 4.35 milligauss
Compass Accuracy: 1 – 2 degrees
Interface: 2-wire I2C
4 Pin .1in Pitch Header for Power & Input
DIM: 1.0 x 0.5in (25mm x 12mm)

L: 1" **W:** 1/2" **H:** 1/2" **WT:** .02

STOCK #	DESC.	1EA
31585-MP	3 Axis Spacial Detector	$4.95

WIRELESS TRANSCEIVER

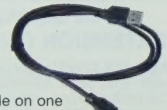


Wireless Data Transceiver for Arduino Type Controllers
High speed, low power, 2.4GHz, radio data transceiver module. Based on the NRF24L01+ RF IC. It is capable of transmitting and receiving data at up to 2Mbps over 126 ISM band channels. Multiceiver design allows up to 6 channels. 3 level 8bit FIFO for both Tx. & Rx registers.8bit command word. Super low power in power Down mode (less than 1uA). Communicates up to 200 feet in open air, less in enclosed spaces. Interface between module and micro-controller is 4 wire SPI. Inputs are 5 volt tolerant, but supply voltage is 3.3 volts maximum. Can be interfaced to 5 volt systems with 3.3v regulators. Interconnect your world. Multiple uses in robotics, remote data collection, alarms, toys etc.
See: http://arduino-info.com/Nrf24L01-2.4ghz-HowTo
Power: 1.9 – 3.3VDC Max
Current: Standby 26uA
TX Current 11.3mA RX Current 13.5mA
Air Data Rate: 250kbps, 1Mbps, 2Mbps selectable
Interface: 4-pin SPI (5V tolerant)
RF 2.4GHz ISM Band – 126 programmable channels
RF TX Power: Programmable 0, -6, -12 or –18dBm
Range 200ft Max open air line of sight
8 Pin (2X4) .1in Pitch Header for Power & Input
Requires a pair for minimum Operation

L: 2-5/32" **W:** 5/8" **H:** 1/2" **WT:** .02

STOCK #	DESC.	1EA
31572-MP	Wireless Data Transceiver	$3.95

USB MICRO B CABLE

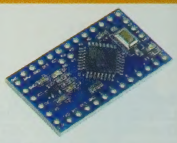


USB cable with a Type A male on one end and a 5 pin USB Micro B Male on the other. Shielded, 28AWG

L: 35in **WT:** .08

STOCK #	DESC.	1EA
31001-CB	35in. Black USB Micro B Cable	$1.95

PRO-MINI MICRO CONTROLLER

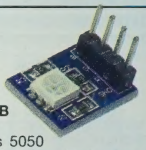


Arduino PRO MINI Compatible Board
Arduino Mini Clone - Get the same power as the UNO, Seeduino or Nano in a low cost and small footprint. Features a Atmega328, 8bit, 16mHz processor, built in 5V regulator, 8 analog inputs and up to 14 digital I/O pins. This module does not have a USB connector. There are 5 dedicated 100 mil spaced pads for connecting the FTDI cable (DTR,TXO,RXI,VCC,GND). This board is ideal for use after you have perfected your idea on a larger board and want to embed it in the final project. Intended for advanced users. Header pins not included. Code libraries, applications and schematics, Information & Freeware available through www. arduino.cc.en and others on-line.
The 16MHz Bootloader, requires Programming with a (off board) USB to TTL converter and FTDI cable
Processor: Atmega328 @ 16mHz
Power: 6.5-12VDC On-Board 5V Regulator (Operating 5VDC)
Supply Current 4 – 9mA (no load on I/O)
Analog Inputs 8 (10-bit ADC)
Digital I/O: 14 (with PWM available on 6)
Memory: Flash: 32K (-2K for bootloader)
SRAM: 2K
EEPROM: 1K
Ports: Arduino I/O Pins 6 Pins for direct wiring to off Board USB connector (Not Supplied)
Manual Reset Button
.1in. pitch holes for headers (NOT Supplied) or direct connection to function

L: 1-5/16" **W:** 11/16" **H:** 1/8" **WT:** .01

STOCK #	DESC.	1EA
31811-MP	Pro-Mini Compatable	$4.95

RGB LED MODULE



Arduino Experimenter's RGB Module
Module with a high brightness 5050 SMD RGB LED configured as common cathode with on board current limiting resistors. By using a micro-controller; a broad range of colors can be achieved by pulse width modulating each LED in different ratios. You can Search the net for various applications and code.
Input: 3.3V or 5V (on-board Resistors)
Forward Voltage Drop VF: Red = 2.1V, Blue= 3.2V, Green = 3.2V
Forward Current IF: 20mA/Color 50mA/Color Max.
Max Reverse Voltage VR: 5V
Intensity min.: Red=500mcd, Green=800mcd, Blue=300mcd
Wavelength Typ.: Red=625nm, Green= 530nm, Blue= 465nm
LENS – Water Clear
Viewing Angle – 120deg

L: 5/8" **W:** 1/2" **H:** 1/4" **WT:** .02

STOCK #	DESC.	1+EA
31810-MP	RGB Experimenters Module	$1.50

X-Y KEY PADS

12 and 16 button Peel-N-Stick keypad. Blue number buttons with white lettering, Red Alpha &/or symbol buttons with White lettering all on a Black background . Bubble type contact pad rated 5mA@12VDC. When button is pressed a Row is connected to a Column. 4in. flex circuit cable with socket connector for .025"sq. X .1" spaced header pins.

H: 3" **W:** 2-3/4" **T:** 1/32" (Body) **WT:** .015

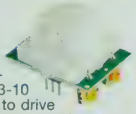
STOCK #	DESC.	1EA
31045-SW	3 X 4 X-Y Keypad	$2.95
31046-SW	4 X 4 X-Y Keypad	$2.95

MOTION DETECTOR MODULE

Ultra Mini Dual Element PIR Motion Detectors for the human Body. 3V digital output to drive Your external transistor & relay (not included)
4-15VDC Operation @ <1mA .
Fixed 2 Sec. Recycle & Hold times
3-5m range with 110 degree detection angle
Dia: 13.5mm **L:** 18mm **WT:** .08

STOCK #	DESC.	1EA
19517-SC	PIR Mini Module	$3.95

MOTION DETECTOR/ LIGHT SENSOR



Latest Dual Element PIR Motion Detector for the human Body with adj. 3-10 lux light sensor. 3V digital output to drive Your external transistor & relay (not included)
5-20VDC Operation @ <1mA .
2 S-5min. Adj. delay
Adj. 3-7m range with <120 degree detection angle.
Selectable Retrigger/No Retrigger
L: 32mm **W:** 23mm **H:** 25mm **WT:** .08

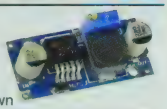
STOCK #	DESC.	1EA
31227-SC	PIR Mini Module/Sensor	$3.95

REFLECTIVE SENSOR

MFG: VISHAY
P/N: TCRT5000L
LED: 60mA max 5VDC max reverse volts
OUTPUT TRANSISTOR: 100mAmax /70Vceo max
Ic on state: 2.1mA @ Vce=5V
PC Mount reflective detector pair with a peak sensitivity
Operating Distance of 2.5mm
L: 10.2mm **W:** 5.8mm **H:** 7mm **WT:** .004

STOCK #	DESC.	1EA
31034-OP	Vishay Reflective Sensor	$0.45

ADJ. DC/DC CONVERTER



Non Isolated, LM2596 Step down adjustable DC/DC Converter, switching Regulator board.
Ideal Point-of-Use regulator
Input: 4.5-40VDC
Output: 1.5-37VDC
Rated Current: 2A
Regulation: 0.5%
L: 1-3/4" **W:** 13/32" **H:** 1/2" **WT:** .03

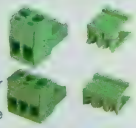
STOCK #	DESC.	1EA
30148-PS	Adj. 2A DC/DC Converter	$3.95

12VDC BUZZER

PC mount magnetic buzzer. Rated: 12VDC (8-15V), <30mA @ 12VDC, 85db output max, 2.3KHz +- 300hz Output tone. These are self contained.
Dia: 12mm **HT:** 9mm **WT:** .003

STOCK #	DESC.	1EA
30009-SU	12V Magnetic Buzzer	$0.99

HEADER PINS & TERMINAL PLUGS



2 or 3 position, end stackable, Header Pin & Plug Pairs.
PC Mount Header Pins, Right Angle
Screw clamp Sockets.
Pin Spacing: 5.08mm C/C. Wire: 14-22AWG
Rated:Voltage: 300V/ Current: 15A. CSA Listed
SOLD AS PIN & PLUG PAIRs
L: 10/15mm **H:** 15mm **T:** 15.2mm **WT:** .01

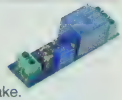
STOCK #	DESC.	1EA	10+EA
19590-TS	2 Pos. Pin/Plug Pair	$0.79	$0.69
19591-TS	3 Pos. Pin/Plug Pair	$0.99	$0.89

ADJUSTABLE PULSE GENERATOR

Compact PC board square wave generator utilizing the 555 IC. Features: 5-15VDC input power, 15mA output drive @ 5VDC; 35mA @ 12V Power. 4 jumper selectable frequency ranges: 1Hz-50Hz, 50-1KHz, 1KHz-10KHz & 10KHz-200KHz. Controls for Frequency Adjust & Duty Cycle. Note: Freq. & Duty Cycle interact with each other. 3Pin I/O header.
L: 1-1/4" **W:** 7/8" **H:** 9/16" **WT:** .02

STOCK #	DESC.	1EA
31070-MI	555 Pulse Generator Board	$5.95

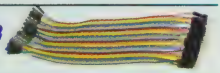
TIME DELAY RELAY MODULE



General use relay module provides approximately 0- 10sec. Delay on Make.
Utilizes the popular NE555 timer IC operating as an monostable multivibrator. Module has ten-turn time adjustment control and power on LED. Power: 5DC
Supply Current: >90mA energized
Contacts: SPDT 10A @125/250VAC/28VDC
Timing Range: 0 to ~10sec.
LED lights when contacts close.
Terminal strips in & Out.
L: 2-3/8" **W:** 11/16" **H:** 3/4" **WT:** .03

STOCK #	DESC.	1+EA
31807-MP	NE555 Time Delay Relay	$3.95

40PC. JUMPER PINS



Multi-colored ribbon cable with a single Pin on both ends of each wire. Peel off what you need. .025"pin fits Arduino header sockets
L: 7" **WT:** .08

STOCK #	DESC.	1EA
31217-PL	Header Jumpers/Pins	$4.95

3 PIN HEADER JUMPERS

11in. Multi-colored ribbon cable with a 3 position socket on both ends of wire. Socket accepts .025 round or square pins. .10in. Pitch.
L: 11" **WT:** .007

STOCK #	DESC.	1EA
31062-PL	3 Cond. Header Jumpers, 11in.	$0.59

65PC. MOLDED BREADBOARD JUMPERS

Multi-colored flexable jumpers with a .024in. dia. steel pin with molded strain relief on ends. Designed for breadboards. You get 4pcs. ea. 240mm and 200mm, 8pcs. 150mm, and 49pcs 120mm
L: 4-1/2"to 9-1/2" **WT:** .08

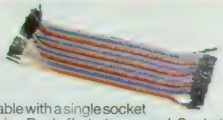
STOCK #	DESC.	1EA
30116-PL	65Pc. Breadboard Jumpers	$3.95

SHIELD BOARD HEADERS

Arduino I/O Interface Shield Headers
6,8 & 10 Pin headers for Arduino UNO PRO, MEGA shield boards. These long pin headers are the correct height to provide stacking and clearance for most shields.
H: 19mm **WT:** .001/002

STOCK #	DESC.	1EA
31051-HC	6 Pin, Tall Headers for Shields	$0.25
31052-HC	8 Pin, Tall Headers for Shields	$0.25
31053-HC	10 Pin, Tall Headers for Shields	$0.30

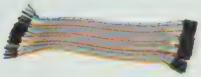
40PC. FEMALE JUMPERS



Multi-colored ribbon cable with a single socket on both ends of each wire. Peel off what you need. Socket accepts .025 round or square pins
L: 5 or 8" **WT:** .09

STOCK #	DESC.	1EA
30117-PL	8in Header Jumpers/Sockets	$3.95
30119-PL	5in Header Jumpers/Sockets	$3.95

40PC.JUMPERS MALE/FEMALE



Multi-colored ribbon cable with a single Male Pin on one end and a single Female Socket on the other end of each wire. Peel off what you need. .025"pin/sockets fits Arduino headers.
L: 7" **WT:** .08

STOCK #	DESC.	1EA
31218-PL	Header Jumpers/Pins & Sockets	$2.72

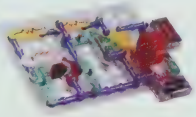
SNAP TOGETHER ELECTRONIC FUNDAMENTALS PROJECT KITS

FUN & EDUCATIONAL

"Snapcircuits" For adults or children wanting to learn the fundamentals of electronics while doing basic, working projects. Parts simply "snap" together. Interlocking, stacking parts such as resistors, diodes, switches, motors, capacitors, interconnects on plastic pieces. Plastic base supports the parts. Build simple electronic "Doorbell", Siren, logic circuits etc. No knowledge of electronics is needed. Simple color drawings in workbook take you through the setup. Ideal for children science classes and demos. Additional/replacement parts available from Mfg.
Requires 4 "AA" batteries (not supplied.
NOT for children under 3, Recommended age 8+

KIT 14264-KT contains 30+ pieces and simple expriments 1-101
WT: 2

STOCK #	DESC.	1EA
14264-KT	Snapcircuits Jr. Project Kit	$29.95



KIT 14263 contains 60+ pieces, Including parts not available in 14264-KT, Experiments 1-101 & 102-305.
WT: 3.3

STOCK #	DESC.	1EA
14263-MI	Snapcircuits Deluxe Project Kit	$49.95

IR ILLUMINATOR KIT

Small circuit board holds 36 I/R leds. Designed to provide "light" for CCD cameras. Depending on how you mount the LEDs, unit will project up to a 6ft spot at 10ft. Plug supply included.
DIA: 2" **T:** 3/9" **WT:** .4

STOCK #	DESC.	1EA
11665-OP	IR Illuminator Kit	$15.95

SUPER DUSTER134

MG Chemicals 402A "SuperDuster 134" removes dust, lint, particals from lens, keybords, printers, paper handlers etc. Variable Valve for control. Non-conductive, or flammable, with no VOCs or residue. 100% HFC134A gas (R-134) so it's ozone safe.
285gm(10oz.) or 450gm (16oz.) Aerosol can.

DIA: 2-5/8" **H:** 6-3/4", 8-1/2" **WT:** .9/1.3

STOCK #	DESC.	1EA
30351-MG	MG #402A-285G Duster 134	$9.51
30352-MG	MG #402A-450G Duster 134	$14.79

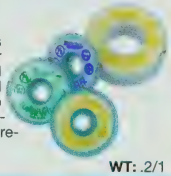
SUPER DUSTER152

MG Chemicals 402B "Super Duster 152" removes dust, lint, particals from lens, keybords, printers, paper handlers etc. Variable Valve for control. Non-conductive, No residue. 99% 1,1-Difluoroethane so it's ozone safe.
285gm (10oz.) or 400gm(14oz.) Aerosol can.
Not to be used near ignition sources
Cannot be shipped by air

DIA: 2-5/8" **H:** 8-1/2",10" **WT:** 1/1.2

STOCK #	DESC.	1EA
30353-MG	MG #402B-285G Duster 152	$7.45
30354-MG	MG #402B-400G Duster 152	$9.95

SOLDER BRAID



MG Chemicals "SuperWick" is made from oxygen free copper & pure RMA rosin. When placed on a solder connection and heated; Superwick will draw up the melted solder. 5ft on a plastic spool. Ideal for PC board repair, field service, etc.

L: 5ft/ 25ft. **WT:** .2/1

STOCK #	DESC.	1EA
30369-MG	#424 5ft X .05in. Superwick	$2.85
30370-MG	#425 5ft X .075in. Superwick	$2.95
30371-MG	#426 5ft X .10in. Superwick	$3.15
30372-MG	#442 25ft X .05in. Superwick	$10.95

SILICONE GREASE

MG Chemicals 8462 is a translucent grease designed to provide lubrication, corrosion and moisture protection. Compatible with most plastics & elastomers. Conforms to 21CFR Sec. 178.3570 " Incidental food contact". Service range -50 to +250C.

35mL tube **WT:** .25

STOCK #	DESC.	1EA
30388-MG	MG #8462-85ML Silicone Grease	$12.39

CONNECTOR COAT

MG Chemicals 4229 "Connector Coat" is a black liquid replacement for tape & shrink. Protects exposed wires & metal. Forms a pliable, moisture resistant bond. Remain flexible from -34 to 200F. Tack free in 10 minutes. 55mL (2oz.) Bottle
Flammable- do not use near ignition sources

WT: .7

STOCK #	DESC.	1EA
30368-MG	MG #4229 Connector Coat	$12.95

LITHIUM GREASE

MG Chemicals 8461 is a lithium formulated white grease designed to provide lubrication, corrosion protection and reduced wear. Won't harden. Service range -40 to +180C.
85mL tube **WT:** .25

STOCK #	DESC.	1EA
30387-MG	MG #8461-85ML Lithium Grease	$7.15

CONTACT CLEANER

MG Chemicals 409B "Electrosolve" Contact cleaner leaves zero residue, penetrates and dissolves contaminants. Safe on most electronic parts like LEDs, boards, ICs and most plastics. Contains Isohexanes.
140gm. (5oz.)or 340gm (12oz.) aerosol can.

DIA: 2-1/8" **H:** 5-5/8", 8" **WT:** .5/1

STOCK #	DESC.	1EA
30361-MG	MG #409B-140G Cleaner	$7.75
30362-MG	MG #409B-340G Cleaner	$13.34

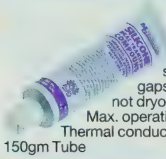
CONTACT CLEANER WITH SILICONE

MG Chemicals Contact with silicone cleaner, penetrates and dissolves contaminants. Safe on switches, locks, battery terminals, plastics & elastomers. Ozone safe. Contains Isohexanes.
140gm. (5oz.) 340gm. (12oz) Aerosol Can
Flammable- do not use near ignition sources

DIA: 2-1/8", 2-5/8" **H:** 5-3/4", 8" **WT:** 5/1.4

STOCK #	DESC.	1EA
30357-MG	MG #404B-140G Cleaner	$7.85
30358-MG	MG #404B-340G Cleaner	$12.39

HEAT SINK COMPOUND

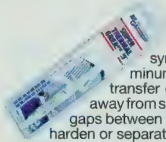


MG Chemicals 860 is a zinc oxide/silicone based thermal transfer compound designed to move heat away from sensitive components. Fills in tiny gaps between Heatsink & part. Will not dryout, harden or separate.
Max. operating temperature: 200C
Thermal conductivity of .675 W/mK.
150gm Tube

WT: .5

STOCK #	DESC.	1EA
30389-MG	MG #860-150G Heat Compound	$15.26

SUPER THERMAL GREASE II



MG Chemicals 8616 is a heavy synthetic oil with Boron Nitride, Aluminum & Zinc Oxide filled thermal transfer grease designed to move heat away from sensitive components. Fills in tiny gaps between Heatsink & part. Will not dryout, harden or separate. Max. operating temperature: 150C. Thermal conductivity of 1.8W/mK.
8.2gm Syringe

WT: .04

STOCK #	DESC.	1EA
30391-MG	MG #8616-3ML Thermal Grease II	$5.95

CONDUCTIVE GREASE

MG Chemicals 846 is a conductive carbon filled silicone grease. Designed to lubricate & maintain a grounding connection. provides a electrical connection between irregular surfaces. Volume resistivity 117 Ohm/cm. Won't harden. Service range -50 to +200C.
80gm tube **WT:** .2

STOCK #	DESC.	1EA
30386-MG	MG #846-80G Cond. Grease	$12.39

POTTING COMPOUND

MG Chemicals 832 is a 2 part (2:1) Epoxy potting compound. Protects sensitive components, solvent and acid resistant. Available either Black opaque or Clear. Includes 3 Stirs & 3 mix Cups
375 mL 12oz. kit Boxed.

WT: 1.2

STOCK #	DESC.	1EA
30376-MG	MG #832-B Black Potting	$30.57
30377-MG	MG #832-C Clear Potting	$29.61

SUPER COLD

MG Chemicals 403 "SuperCold134" locates heat sensitive components, rapid cool samples and solidify adhesives & gums. Variable Valve for control. Non-conductive, or flammable, with no VOCs or residue. 100% HFC134A gas (R-134) so it's ozone safe.
285gm(10oz.) or 400gm(14oz) Aerosol can.
NOTE: Freezes to -51deg. C. can cause bodily harm

DIA: 2-5/8" **H:** 6-5/8", 8-1/2" **WT:** .9/1.2

STOCK #	DESC.	1EA
30355-MG	MG #403A-185G Super Cold 134	$10.19
30356-MG	MG #403A-400G Super Cold 134	$13.87

CLEANER & DEGREASER

MG Chemicals 406B " Superwash" cleaner and degreaser. Rapid dry for fast cleaning & degreasing of PC boards, motors, gears, electrical equipment. Non-conductive, safe on plastics, no residue and Ozone safe.
425gm (15oz.) aerosol can.
Flammable- do not use near ignition sources

DIA: 2-5/8" **H:** 9-1/2" **WT:** 1

STOCK #	DESC.	1EA
30359-MG	MG #406B Super Wash	$15.26

FLUX REMOVER

MG Chemicals 4140 Flux Remover removes all rosin, non-rosin, no clean, ionic & non-ionic flux & residue after soldering. Variable valve allows for a controlled flow. Safe on plastics. No residue.
400gm (14oz.) aerosol can.
Flammable- do not use near ignition sources

DIA: 2-5/8" **H:** 8" **WT:** 1

STOCK #	DESC.	1EA
30364-MG	MG #4140 Flux Remover	$13.34

ROSIN FLUX

MG Chemicals 835 "Rosen Flux" is an instant wetting type RA liquid flux. Use with leaded and lead free solders. Non-corrosive, non-conductive residue. Meets RA14256 requirements. RoHS Compliant.
100mL (4.2oz.)Bottle
Flammable- do not use near ignition sources

WT: .3

STOCK #	DESC.	1EA
30382-MG	MG #835-100ML Rosin Flux	$7.71

CONTROL CLEANER

MG Chemicals "Nu-Trol" Control cleaner is blend of solvents, cleaners and lubricants for moving parts, restores continuity. Variable valve allows for a controlled flow. Plastic & Ozone safe, 140gm. (5oz.) aerosol can.

DIA: 2-1/8" **H:** 5-5/8" **WT:** .5

STOCK #	DESC.	1EA
30350-MG	MG #401B-140G Cleaner	$7.65

CONDUCTIVE EPOXY

MG Chemicals 8331 is a Fast cure, conductive silver filled epoxy. 10min. work time @ 25C, .017Ohm/Cm resisitivity, 0.9W/(mK) thermal. 1:1 mix ratio. 5hr cure@ 25C/15min cure @ 65C. Water, solvent and acid resistant.
14g Premeasured PartA & B Syringes

WT: .06

STOCK #	DESC.	1EA
30380-MG	MG #8331-14G Silver Epoxy	$38.71

H/D FLUX REMOVER

MG Chemicals 413B Heavy Duty Flux Remover is a fast drying, cleaner for the non component side of board. Removes all ionic & non-ionic residue after soldering.
425gm (15oz.) aerosol can.
Flammable- do not use near ignition sources
Caution- Use in well ventilated area.

DIA: 2-5/8" **H:** 9-1/2" **WT:** 1

STOCK #	DESC.	EA
30363-MG	MG #413B Flux Remover	$17.95

SILICONE CONFORMAL COAT

MG Chemicals 422B "Silicone Conformal Coating" is a fast drying, flexible protective coating. UL recognized for class94V-0. Protects against moisture, dirt, arcing, shorts and insulates circuit components. Visiable under UV light for easy inspection.
340gm (12oz.) aerosol can.

DIA: 2-5/8" **H:** 8" **WT:** 1

STOCK #	DESC.	EA
30366-MG	MG #422B Silicone Coating	$18.95

RED GLPT VARNISH

MG Chemicals 4228 "Red Varnish" insulating Coating" motor, transformer & coil windings. Thermal protection to 155C. 3000V/mil dielectric strength. Tack free 10min./cure in 16-24hr.
225mL (8oz.) Bottle
Flammable Wet-do not use near ignition sources

WT: .4

STOCK #	DESC.	EA
30367-MG	MG #4228 Red Varnish	$24.97

RUBBER RENEW

MG Chemicals 408A "Rubber Renue"is a fast drying cleaner for rubber belts, rollers etc. Removes particles, oxidation and softens hard or glazed surfaces. No Residue & Ozone safe.
125mL (4.5oz.)Bottle
Caution- Use in well ventilated area.

WT: .6

STOCK #	DESC.	EA
30360-MG	MG #408A Rubber Renue	$7.95

CONFORMAL COAT

MG Chemicals 419C "Acrylic Conformal Coating" is a fast drying, IPC 830 certified Xylene & Toluene free protective coating. Meets UL 94V-0. Protects against moisture, dirt, arcing, shorts and insulates circuit components. Visiable under UV light for easy inspection.
340gm (12oz.) aerosol can.

WT: 1

STOCK #	DESC.	EA
30365-MG	MG #419C Acrylic Coating	$17.95

FLAME RETARDANT POTTING

MG Chemicals 833FRB is a 2 part (2:1) Black Epoxy potting compound that meets UL94-VO test per UL746A. Protects sensitive components, Water, solvent and acid resistant. Includes 3 Stirs & 3 mix Cups. Solvent Free, RoHS Compliant
375 mL (12oz.) kit Boxed.

WT: 1.2

STOCK #	DESC.	EA
30378-MG	MG #832-B Black Potting	$43.95

CONDUCTIVE COAT

MG Chemicals 838 "Total Ground" is a acrylic paint with conductive carbon filler. Resists abrasion, won't rub off, reduces emi/rfi. Surface resistance of 250Ohm/sq. with single single 1mil. coat. Touch Time: 20min. Recoat Time 5min. Full Dry@ 25C/24hr. Full Dry @ 65C: 15min.
340gm (12oz) Aerosol Can
Flammable- do not use near ignition sources

DIA: 2-5/8" **H:** 8" **WT:** 1

STOCK #	DESC.	EA
30383-MG	MG #838-340G Carbon Coat	$18.95

NICKEL CONDUCTIVE COAT

MG Chemicals 841 "Super Shield" is a UL recognized acrylic paint with conductive nickel filler. Approved for ABS & Polycarbonates. Resists abrasion, won't rub off, reduces emi/rfi 25-75db with1.5mil coat 10K-18GHz. Surface resistance of 0.7Ohm/sq. with single single 1mil. coat. Touch Time: 45sec. Recoat Time 1min. Full Dry@ 25C/24hr. Full Dry @ 65C: 30min.
340gm (12oz) Aerosol Can
Flammable- do not use near ignition sources

DIA: 2-5/8" **H:** 8" **WT:** 1.1

STOCK #	DESC.	EA
30384-MG	MG #841-340G Nickel Coat	$36.95

ISOPROPYL ALCOHOL

MG Chemicals 824 "Isopropyl Alcohol" is 99.9% pure.Ideal general purpose cleaner, safe on plastics. Removes light oils, flux and contaminants from optics, relays, boards etc.
1qt. Bottle
Flammable- do not use near ignition sources

WT: 1.8

STOCK #	DESC.	EA
30373-MG	MG #824-1L Iso. Alcohol	$12.95

ISOPROPYL ALCOHOL PADS

MG Chemicals 824-W is a Box of 25 individual packets of 99.9% pure isopropyl alcohol in a 5" X 6" cloth type wipe. Ideal general purpose cleaner, safe on plastics. Removes light oils, flux and contaminants from optics, relays, boards, work stations etc.
25/ Box
Flammable- do not use near ignition sources

WT: 1

STOCK #	DESC.	EA
30374-MG	MG #824-W25 Alcohol Pads	$11.45

ISOPROPYL ALCOHOL WIPES

MG Chemicals 8241-T is a Canister of 70% pure isopropyl alcohol & 30% water in 6" X 7" wipes. Ideal general purpose cleaner, safe on plastics. Removes light oils, flux and contaminants from optics, relays, boards, work stations etc.
75/Auto feed canister
Flammable- do not use near ignition sources

WT: .8

STOCK #	DESC.	EA
30375-MG	MG #8241-T Alcohol Wipe	$8.95

3D PRINTER COLOR FILIMENT

.25kg spools (.55lb.) Premium Plastic Fiament used in many 3D printers to create plastic parts.
Fit machines that hold 120mm (4-3/4in.) X 52mm (2in.) Spools; or can be rewound.
Material **PLA**: Polylatic Acid

Spool Dia: 4-3/4" **H:** 2" **Ship WT:** .84

PLA
Dia: 1.75mm

STOCK #	DESC.	EA
31715-HD	1.75mm PLA Trans. Flament	$12.95
31716-HD	1.75mm PLA White Flament	$12.95
31717-HD	1.75mm PLA Black Flament	$12.95
31718-HD	1.75mm PLA Red Flament	$12.95
31719-HD	1.75mm PLA Yellow Flament	$12.95
31721-HD	1.75mm PLA Green Flament	$12.95
31722-HD	1.75mm PLA Blue Flament	$12.95
31723-HD	1.75mm PLA Orange Flament	$12.95

PLA
Dia: 3.00mm

STOCK #	DESC.	EA
31735-HD	3.00mm PLA Trans. Flament	$12.95
31736-HD	3.00mm PLA White Flament	$12.95
31737-HD	3.00mm PLA Black Flament	$12.95
31738-HD	3.00mm PLA Red Flament	$12.95
31739-HD	3.00mm PLA Yellow Flament	$12.95
31740-HD	3.00mm PLA Green Flament	$12.95
31741-HD	3.00mm PLA Blue Flament	$12.95
31742-HD	3.00mm PLA Orange Flament	$12.95

THOUSANDS MORE ITEMS ON MPJA.COM

"DUST OFF" AEROSOL DUSTER

FALCON Dust-Off" , 12oz. can of duster used to blow dust and durt off equipment. Includes extension tube for hard to reach spots. Contains difluoroethane, Does not contain CFC's!.
CANNOT BE SHIPPED AIR

WT: 1

STOCK #	DESC.	EA	4+EA
16495-CE	DUST-OFF Duster	$4.95	$4.00

THERMAL COMPOUND

1.5g Aluminum oxide/silicone based thermal transfer compound in a mini syringe. Designed to move heat away from sensitive components. Fills in tiny gaps between Heatsink & part. Will not dryout, harden or separate.
Max. operating temperature: 180C
Thermal conductivity of 5 W/m.K.
Thermal Resistance: .011-.017 C-in/W
Volume Resistance: >10E12 (>10^{12}) ohm/cm

WT: 3gm

STOCK #	DESC.	EA
31827-HK	S606C Heat Sink Compound	$1.50

SELECTABLE OUTPUT SUPPLY

P/N: 9902-PS
Input: 90-250VAC 60Hz
Outputs: 3,4.5, 6, 7.5,9,12VDC @ 2000mA Selectable
Specifications/Features: Enclosed, Benchtop regulated, switching supply. Switch selectable output. Front panel Power switch, Select switch & Binding posts. 6ft. 2 wire input power cord with 2 blade plug.
L: 6-1/2" **W:** 3-7/8" **H:** 2-1/4" **WT:** 1.1

STOCK #	DESC.	1EA	5EA
9902-PS	Multi Output Supply	$19.95	$17.95

0-18VDC @ 3A BENCH SUPPLY

P/N: 9600
Input: 110 VAC 60Hz
Output: 0-18VDC @ 0-3A Constant Voltage or Current
Specifications/Features: True Constant Current (Can a short) Enclosed Linear bench supply with dual LCD displays for output Volts & Amps. .01%+3mV Line / .02%+3mV Load regulation, <1mV RMS ripple. Front binding posts. Metal case & rubber feet. Internal Temp. controlled fan
L: 9-1/2" **W:** 3-5/8" **H:** 6" **WT:** 8.6

STOCK #	DESC.	1EA	5+EA
9600-PS	0-18V/3A Adj. Supply	$59.95	$52.95

3A BENCH SUPPLY

P/N: 9616
Input: 110 VAC 60Hz
Output: 0-30VDC
0-3A Constant Voltage/Current(9616)
Specifications/Features: Adjustable Voltage/adjustable Current limit. Enclosed regulated switching bench supply with backlit LCD display for output Volts & Amps. 1% +10mV Line/ 1%+5mV Load regulation, <200mV RMS max ripple. Safety Banana jacks output. Internal fan.
H: 6-1/2" **W:** 2-1/2" **D:** 8-3/4" **WT:** 3.9

STOCK #	DESC.	1EA
9616-PS	Mini 0-30V/3A Bench Supply	$49.95

0-50VDC @ 3A BENCH SUPPLY

P/N: 9612
Input: 110 VAC 60Hz
Output: 0-50VDC @ 0-3A Constant Voltage or Current
Specifications/Features: True Constant Current (Can drive a short). Enclosed Linear bench supply with dual LED displays for output Volts & Amps. .01% +3mV Line /.02%+3mV Load regulation, <1mV RMS ripple. Front binding posts. Internal Temp. controlled fan.
L: 11-1/4" **W:** 5-3/16" **H:** 6-1/4" **WT:** 14

STOCK #	DESC.	1EA
9612-PS	0-50V/3A Adj. Supply	$99.00

0-30VDC/5A BENCH SUPPLY

Input: 110 VAC 60Hz
Output: 0-30VDC @ 0-5A Constant Voltage or Current
Specifications/Features: True Constant Current (Can drive a short). Enclosed Linear bench supply with dual LED displays for output Volts & Amps. .01% +3mV Line /.02%+3mV Load regulation, <1mV RMS ripple. Front binding posts. Internal Temp. controlled fan.
L: 11-1/4" **W:** 5-3/16" **H:** 6-1/4" **WT:** 14

STOCK #	DESC.	1EA	5+EA
9603-PS	0-30V/5A Bench Supply	$110.00	$95.00

0-30V @ 24A BENCH SUPPLY

P/N: 9317-PS
Input: 110 VAC 60Hz
Output: 0-30VDC 0-24A Continious/30A Peak Constant Voltage/Current
Specifications/Features: True Constant current (Will drive a short). Enclosed Switching bench supply with LCD displays for output Volts & Amps. <100mVP/P ripple. Front Safety Banana Jacks for <5A , Heavy Duty Binding Posts on rear panel for the higher current.
W: 8-1/4" **H:** 3-1/4" **D:** 13" **WT:** 8

STOCK #	DESC.	1EA
9317-PS	0-30VDC 24A Bench Supply	$249.00

0-30VDC @ 10A BENCH SUPPLY

Input: 110 VAC 60Hz
Output: 0-30VDC @ 0-10A Constant Voltage or Current
Specifications/Features: True Constant Current (Can drive a short) Enclosed Linear bench supply with dual LED displays for output Volts & Amps. .01% +3mV Line /.05%+3mV Load regulation, <1.5mV RMS ripple. Front binding posts.
L: 11-1/4" **W:** 10-1/2" **H:** 6-1/2" **WT:** 28

STOCK #	DESC.	1EA
9604-PS	0-30V/10A Adj. Supply	$169.00

0-30VDC @ 19A BENCH SUPPLY

Input: 110 VAC 60Hz
Output: 0-30VDC @ 0-19A Constant Voltage or Current
Specifications/Features: True Constant Current (Can drive a short). Enclosed Linear bench supply with dual LED displays for output Volts & Amps. .01% +3mV Line /.05%+3mV Load regulation, <1.5mV RMS ripple. Front binding posts. Internal Temp. controlled fans.
L: 11-1/4" **W:** 10-1/2" **H:** 6-1/2" **WT:** 41

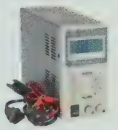
STOCK #	DESC.	1EA	5+EA
9950-PS	0-30V/19A Adj. Supply	$269.00	$239.00

0-60VDC BENCH SUPPLY

Input: 110 VAC 60Hz
Output: 0-60VDC @ 0-10A Constant Voltage or Current
Specifications/Features: True Constant Current (Can drive a short) Enclosed Linear bench supply with dual LED displays for output Volts & Amps. .01% +3mV Line /.05%+3mV Load regulation, <1.5mV RMS ripple. Front binding posts.
L: 11-1/4" **W:** 10-1/2" **H:** 6-1/2" **WT:** 38

STOCK #	DESC.	1EA
9960-PS	0-60V Bench Supply	$259.00

10A MINI BENCH SUPPLY



P/N: 9631
Input: 110 VAC 60Hz
Output: 0-30VDC, 0-10A Constant Voltage/Current
Specifications/Features: Adjustable Voltage/adjustable Current limit. Enclosed regulated switching bench supply with backlit LCD display for output Volts & Amps. 0.2% +10mV Line/0.2%+5mV Load regulation, <100mV RMS max ripple. Banana jacks output. Internal fan.
H: 6-1/2" **W:** 3-1/2" **D:** 8-3/4" **WT:** 4.6

STOCK #	DESC.	1EA
9631-PS	Mini 0-30V/10A Bench Supply	$109.95

0-15V @ 1A SUPPLY

Input: 110 VAC 60Hz
Output: #1: Selectable 0-5 or 0-15VDC Constant Voltage @ 1A .
#2: 5VDC @ 500mA USB Port
Specifications/Features: Enclosed Linear Bench supply with a LED display for output Volts & a Analog Meter for Amps. <150mV Load regulation, <3mV RMS ripple. Front binding posts. Front USB A Female, Rear USB B Female.
D: 6-1/2" **W:** 4" **H:** 6-1/4" **WT:** 3.4

STOCK #	DESC.	1EA
9319-PS	0-15V @ 1A Bench Supply	$32.00

PROGRAMMABLE 0-36VDC @ 3A BENCH SUPPLY

INPUT: 110 VAC 60Hz
OUTPUT: 0-36VDC @ 0-3A
Resolution V: 1mV @<3.999V 10mV @>4.000V
I: <=1mA
Ripple: <= 2mV RMS
Regulation: <= .02% +10mv Line/Load
Specifications/Features: Programmable supply with back-lit LCD display, numeric keypad, rotary digital control. Operates as Constant Voltage, Current or Power. Up to 10 settings can be stored in memory. Easy set up using keypad. OPTIONAL Control packages allows PC control via RS232 or USB interface,
W: 8-1/2" **H:** 3-3/4" **D:** 11" **WT:** 14.9

STOCK #	DESC.	1EA
15316-PS	Programmable Supply	$199.00
15317-PS	RS232 Computer Interface	$24.95
15318-PS	USB Computer Interface	$24.95
15319-PS	RS485 Computer Interface	$24.95

0-120VDC/1A BENCH SUPPLY

MFG: MPJA Inc.
Input: 110 VAC 60Hz
Output: 0-120VDC @ 0-1A
Specifications/Features:
Constant Voltage or Current Enclosed bench supply with single backlit LCD meter that displays Volts & Amps. 10 turn Voltage control, Push Button Current control (30ma resolution). <.01% Line/Load regulation (CV) .05% line/ load (CC), <1mV /<2mA RMS ripple. Front panel output Banana Jacks & Terminal strips.Rubber feet, top carry strap
W: 5-1/4" **D:** 11-1/4" **H:** 7-1/2" **WT:** 14.3

STOCK #	DESC.	1EA	5+EA
9312-PS	0-120V/1A Supply	$129.00	$119.00

0-120VDC/3A BENCH SUPPLY

360° WEB

MFG: MPJA Inc.
Input: 110 VAC 60Hz
Output: 0-120VDC @ 0-3A
Specifications/Features: Regulated Bench supply with Adjustable Current limit. LED meter displays Volts & Amps. Push button switch connects supply to load. Multi turn Voltage control for precise settings. 5mV RMS ripple. Front panel output Binding Posts & Terminal strip for remote Voltmeter Sensing at the load.
W: 10-3/4" **D:** 15" **H:** 6" **Ship WT:** 26.5

STOCK #	DESC.	1EA
9313-PS	0-120V 3A Bench Supply	$265.95

High reliability line of power supplies designed to operate over the wide range of AC power found world wide.

- Overvoltage, Overcurrent, Short Circuit Protected
- 100% Full Load Burn-in Tested--Full rated to 50°C

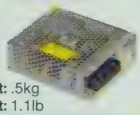
No minimum load--UL/CANADA/USA/CE listed.

GENERAL SPECIFICATIONS

RoHS Compliant

Line Regulation (Full Load): < +/- 0.5%
Load Regulation: .05% (0-100%)
Inrush Current: 20A/115V, 40A/230V
Input Leakage Current: <0.7mA @ 230VAC
Output Adjustment Range: +/- 10%
Overload Protection: 40/60W:110-150% 100/150W: 110-130%
Over Voltage Protection: 115-150%
Rise Time: 50mS Full Load (Typical)
Hold Up Time: 20mS Full Load (typical)
Withstand Voltage (1 Min.): Input to Output: 3.0KV AC
Input to Frame/Ground: 1.5KV AC Output to Frame/Ground: 0.5KV AV
MTBF: 100,000 Hours
Operating Temp. & Humidity: -10° C to +50° C 20%-93% Non Condensing
Storage Temp. & Humidity: -20° C to +85° C 20%-95% Non Condensing
Cooling: Convection
Approvals/Standards:
cULus Ref. No.: E22014
Safety: GB4943, UL60950, EN60950
EMC: GB9254, EN55022 class B, EN55024
EN61000-3-2/3 EN61000-4-2/3/4/5/6/8/11

40W SUPPLIES



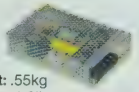
Input: 85-264 VAC 47-63Hz Universal
L: 129mm **W:** 98mm **H:** 40mm **Wt:** .5kg
L: 5.08" **W:** 3.86" **H:** 1.57" **Wt:** 1.1lb

STOCK #	OUTPUT	PART #	RIP/NOISE	EFF	CASE
16000-PS	5V/8A	HF-40W-SL5	80mV	72%	A
16001-PS	12V/3.5A	HF-40W-SL12	100mV	76%	A
16002-PS	15V/2.8A	HF-40W-SL15	100mV	76%	A
16003-PS	24V/1.8A	HF-40W-SL24	100mV	78%	A
16004-PS	48V/0.8A	HF-40W-SL48	150mV	80%	A

DISCOUNT PRICING

Qty: 1-9	Qty: 10-99	Qty: 100+
$16.00	$15.49	$14.80

60W SUPPLIES



Input: 85-264 VAC 47-63Hz Universal
L: 160mm **W:** 98mm **H:** 39mm **Wt:** .55kg
L: 6.3" **W:** 3.86 **H:** 1.54" **Wt:** .1.2lb

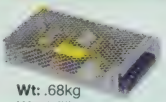
STOCK #	OUTPUT	PART #	RIP/NOISE	EFF	CASE
16005-PS	5V/12A	HF-60W-SL5	80mV	73%	B
16006-PS	12V/5A	HF-60W-SL12	100mV	76%	B
16007-PS	15V/4A	HF-60W-SL15	120mV	77%	B
16008-PS	24V/2.5A	HF-60W-SL24	150mV	80%	B
16009-PS	48V/1.3A	HF-60W-SL48	200mV	81%	B

DISCOUNT PRICING

Qty: 1-9	Qty: 10-99	Qty: 100+
$19.95	$18.90	$18.15

360° VIEW @MPJA.COM

100W SUPPLIES



Input: 85-132/170-264 VAC 47-63Hz Selectable
L: 199mm **W:** 98mm **H:** 39mm **Wt:** .68kg
L: 7.83" **W:** 3.86" **H:** 1.54" **Wt:** 1.5lb

STOCK #	OUTPUT	PART #	RIP/NOISE	EFF	CASE
16010-PS	3.3V/20A	HF-100W-SF3.3	100mV	77%	C
16011-PS	5V/20A	HF-100W-SF5	100mV	78%	C
16012-PS	7.5V/13.5A	HF-100W-SF7.5	100mV	82%	C
16014-PS	15V/6.7A	HF-100W-SF15	100mV	82%	C
16016-PS	48V/2.2A	HF-100W-SF48	150mV	84%	C

DISCOUNT PRICING

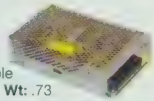
Qty: 1-9	Qty: 10-99	Qty: 100+
$26.50	$25.60	$24.00

STOCK #	OUTPUT	PART #	RIP/NOISE	EFF	CASE
16013-PS	12V/8.5A	HF-100W-SF12	100mV	82%	C
16015-PS	24V/4.5A	HF-100W-SF24	100mV	83%	C

DISCOUNT PRICING

Qty: 1-9	Qty: 10-99	Qty: 100+
$21.69	$18.95	$17.13

150W SUPPLIES



Input: 85-132/170-264 VAC 47-63Hz Switch Selectable
L: 199mm **W:** 110mm **H:** 50mm **Wt:** .73
L: 7.83" **W:** 4.33" **H:** 1.97" **Wt:** 1.6lb

STOCK #	OUTPUT	PART #	RIP/NOISE	EFF	CASE
16017-PS	5V/30A	HF-150W-SF5	120mV	78%	D
16018-PS	7.5V/20A	HF-150W-SF7.5	120mV	80%	D
16019-PS	9V/17A	HF-150W-SF9	120mV	80%	D
16033-PS	28V/5.5A	HF-150W-SF28	150mV	85%	D
16034-PS	36V/4.2A	HF-150W-SF36	200mV	86%	D

DISCOUNT PRICING

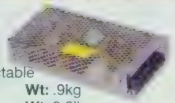
Qty: 1-9	Qty: 10-99	Qty: 100+
$28.60	$27.95	$27.03

STOCK #	OUTPUT	PART #	RIP/NOISE	EFF	CASE
16020-PS	12V/12.5A	HF-150W-SF12	120mV	82%	D
16032-PS	24V/6.5A	HF-150W-SF24	150mV	85%	D

DISCOUNT PRICING

Qty: 1-9	Qty: 10-99	Qty: 100+
$26.85	$23.69	$22.72

240W SUPPLIES



Input: 85-132/170-264 VAC 47-63Hz Switch Selectable
L: 199mm **W:** 110mm **H:** 50mm **Wt:** .9kg
L: 7.83" **W:** 4.33" **H:** 1.97" **Wt:** 2.0lb

STOCK #	OUTPUT	PART #	RIP/NOISE	EFF	CASE
18434-PS	5V/40A	HF-240W-SF5	100mV	80%	D
18437-PS	48V/5A	HF-240W-SF48	150mV	87%	D

DISCOUNT PRICING

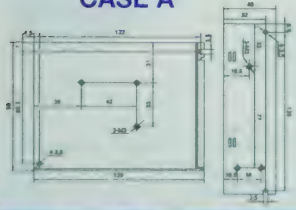
Qty: 1-9	Qty: 10-99	Qty: 100+
$45.00	$38.90	$35.90

STOCK #	OUTPUT	PART #	RIP/NOISE	EFF	CASE
18435-PS	12V/18A	HF-240W-SF12	100mV	83%	D
18436-PS	24V/10A	HF-240W-SF24	120mV	85%	D

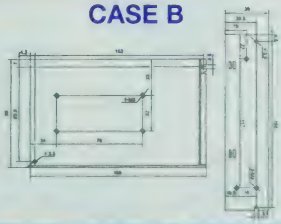
DISCOUNT PRICING

Qty: 1-9	Qty: 10-99	Qty: 100+
$34.95	$32.49	$29.59

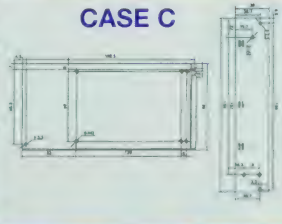
CASE A



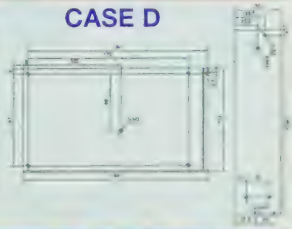
CASE B



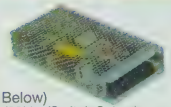
CASE C



CASE D



DUAL OUTPUT SUPPLIES



MFG: HENGFU
P/N: HF100W-DF series (See Below)
Input: 85-132/170-264VAC 50/60Hz. (Switch Select)
Output: See below
Specifications/Features: 100W, Enclosed regulated switching supply with Floating outputs. Line Reg: 0.5% Load Reg: 0.5% on 5V; 3% on #2. Over Voltage & Current protected. LED output indicator. Terminal strip In/Out. CE listed.

L: 7-7/8" **W:** 3.7/8" **H:** 1-5/8" **WT:** 1.6

STOCK #	SERIES	OUTPUT #1	#2	1EA
18111-PS	DF-A	5V/10A	12V/4A	$39.95
18112-PS	DF-B	5V/15A	15V/2A	$39.95
18113-PS	DF-C	5V/15A	24V/1A	$39.95

INDUSTRIAL 15W SUPPLIES

MFG: HENGFU
Input: 85-264VAC 47-63Hz
Output: see chart
Specifications/Features:
Open Frame regulated switching supply. Over Voltage & Current protected. LED output indicator. Header In/Out. UL/us/canada/CE listed

L: 4.0" **W:** 1.82" **H:** 1.0" **Wt:** .2lb

STOCK #	OUTPUT	PART #	1EA
18438-PS	5V/3A	HF15W-SPL-5	$15.99
18439-PS	12V/1.3A	HF15W-SPL-12	$15.99
18440-PS	24V/0.6A	HF15W-SPL-24	$15.99
18441-PS	48V/0.3 A	HF15W-SPL-48	$15.99

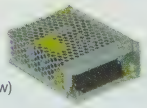
INDUSTRIAL 25W SUPPLIES

MFG: HENGFU
Input: 85-264VAC 47-63Hz
Output: see chart
Specifications/Features:
Open Frame regulated switching supply. Over Voltage & Current protected. LED output indicator. Header In/Out. CE listed

L: 4.0" **W:** 1.82" **H:** 1.0" **Wt:** .2lb

STOCK #	OUTPUT	PART #	1EA
18442-PS	5V/5A	HF25W-SPL-5	$14.95
18443-PS	12V/2.1A	HF25W-SPL-12	$13.98
18444-PS	24V/1.1A	HF25W-SPL-24	$13.98
18445-PS	48V/0.5A	HF25W-SPL-48	$14.95

POWER SUPPLIES/CHARGER

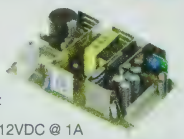


MFG: HENGFU
P/N: HF20W-SB series (See Below)
Input: 85-264VAC 50/60Hz.
Output: See below
Specifications/Features: 20W, Enclosed regulated switching supply with Charger for Lead Acid or Lithium battery. Auto switch to battery upon AC fail (UPS). Over Voltage, Current & Low Battery protected. LED output indicator. Terminal strip In/Out. CE listed.

L: 4-3/8" **W:** 3-1/8" **H:** 1-1/2" **WT:** .6

STOCK #	SERIES	OUTPUT #1	CHARGER	1EA
18116-PS	SB-12	12V/1.5A	13.8V/0.5A	$19.95
18117-PS	SB-24	24V/0.7A	27.1V/0.2A	$19.95

5V & 12V & 3.3V SUPPLY

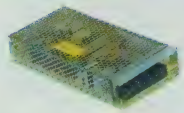


MFG: PowDec
P/N: UPN65-31
Input: 115/230VAC 50/60Hz
Outputs: #1: +5VDC @ 10A
#2: +3.3VDC @ 10A **#3:** +12VDC @ 1A
Specifications/Features: Max. output 65W, Open frame switching supply. 3.0% Load Regulation (Vout 1& 2/10% V3), Current Limit. Req. minimum load, Rated to 70 Deg. "C". UL/canada/usa/TUV/CE listed.

L: 5" **W:** 3" **H:** 1-3/8" **WT:** .8

STOCK #	DESC.	1EA
18847-PS	PowDec 3 Output Supply	$4.95

INDUSTRIAL SUPPLIES

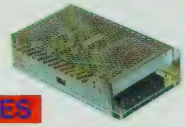


MFG: MEANWELL
Input: 120/240VAC 50/60Hz (Switch Select)
Output: see chart
Specifications/Features:
Enclosed regulated switching supply. Over Voltage & Current protected. LED output indicator. Terminal strip In/Out. UL/us/canada/CSA/us/canada/CE/TUV listed

100W SUPPLIES

L: 7.83" **W:** 3.85" **H:** 1.5" **WT:** 1.5

STOCK #	OUTPUT	M/W PART #	NOISE	1EA
17823-PS	5V/20A	S-100F-5	100mV	$34.95
17826-PS	48V/2.2A	S-100F-48	150mV	$34.95

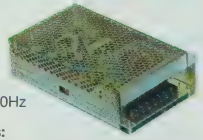


150W SUPPLIES

L: 7.83" **W:** 4.33" **H:** 1.97" **WT:** 1.8

STOCK #	OUTPUT	M/W PART #	NOISE	1EA
17827-PS	5V/30A	S-150-5	150mV	$44.95
17830-PS	48V/3.2A	S-150-48	240mV	$44.95

9V @ 16.7A SUPPLY



MFG: MEANWELL
P/N: S-150-9
Input: 120/240VAC 50/60Hz
Output: 9VDC @ 16.7A
Specifications/Features:
Enclosed regulated switching supply. Over Voltage & Current protected. LED output indicator. Terminal strip In/Out. ULusa/canada/CE listed.

L: 7-7/8" **W:** 4-3/8" **H:** 2" **WT:** 1.72

STOCK #	DESC.	1EA
18367-PS	9V/16.7A Meanwell Supply	$35.00

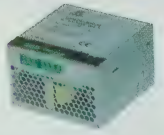
QUAD OUTPUT SUPPLY

MFG: MEANWELL
P/N: QP-200-3D
Input: 100-240VAC 50/60Hz
Output: #1: +5VDC @ 10A **#2:** +3.3 @ 15A
#3: +24V @ 4A **#4:** -12V @ 0.7A
Specifications/Features: Fan cooled, Enclosed regulated switching supply with PFC, Remote Sense (V1&2) & Power Good output. Over Voltage & Current protected. LED output indicator. 3A Min Load on V1. Terminal strip In/Out. ULusa/canada/TUV/CE listed.

L: 9" **W:** 4-1/2" **H:** 2" **WT:** 2.7

STOCK #	DESC.	1EA
18366-PS	Quad Meanwell 200W Supply	$29.95

DIN RAIL POWER SUPPLIES

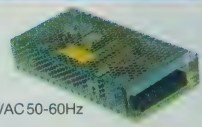


MFG: HENGFU
P/N: HF150-SDR Series
Input: 85-132VAC 50/60Hz
Output: 150W See Below
Specifications/Features:
Compact supply mounts on TS35/7.5 or /15 DIN rails 0.5% line/load reg, 120/150mV Ripple/noise. Over Voltage/Current/Short circuit protected, LED Power out indicator. Built-in EMI Filter. CE listed

W: 4-1/4" **H:** 4-1/4" **D:** 3-3/8" **WT:** 1.6

STOCK #	DESC.	1EA
17895-PS	12V/12.5A DIN Supply	$49.95
17896-PS	24V/6.3A DIN Supply	$49.95
17897-PS	48V/3.1A DIN Supply	$49.95

INDUSTRIAL SUPPLIES

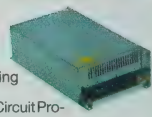


MFG: MEANWELL
Input: 100-120/200-240VAC 50-60Hz (Switch Select)
FACTORY SET AT 115VAC
Output: see chart
Specifications/Features:
Enclosed regulated switching supply. Over Voltage & Current protected. LED output indicator. Terminal strip In/Out. UL/us/canada/CE listed

L: 6.25" **W:** 3.85" **H:** 1.5" **WT:** 1.2

STOCK #	OUTPUT	M/W PART #	NOISE	1EA
19506-PS	12V/8.5A	NES-100-12	120mV	$24.95
19508-PS	24V/4.5A	NES-100-24	120mV	$24.95

300W POWER SUPPLIES



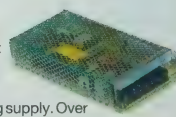
High reliability, Enclosed, Switching power supplies.
•Overvoltage, Overcurrent, Short Circuit Protected
•100% Full Load Burn-in Tested--Full rated to 50°C
•No minimum load

Input: 90-130 VAC Input 50/60Hz
Output: See below

L: 9.5" **W:** 4.9" **H:** 2.6" **WT:** 3

STOCK #	DESC.	1EA	10EA
16486-PS	5V/60A Power Supply	$65.00	$61.00
16487-PS	9V/33A Power Supply	$65.00	$61.00
16489-PS	24V/12.5A Power Supply	$65.00	$61.00
16491-PS	48V/6.3A Power Supply	$65.00	$61.50

5V/20A SUPPLY

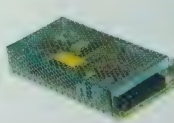


Input: 120/240VAC 50/60Hz (Switch Select)
Output: 5DC @ 20A
Specifications/Features:
Enclosed regulated switching supply. Over Voltage & Current protected. LED output indicator. Terminal strip In/Out. CE listed

L: 7.83" **W:** 3.85" **H:** 1.5" **WT:** 1.5

STOCK #	DESC.	1+EA
31020-PS	5V/20A Switching Supply	$19.95

150W INDUSTRIAL SUPPLY

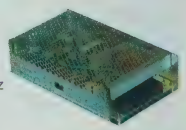


Input: 120/240VAC 50/60Hz (Switch Select)
Output: See Below
Specifications/Features:
Enclosed regulated switching supply. Over Voltage & Current protected. LED output indicator. Terminal strip In/Out. CE listed

L: 7.83" **W:** 4.33" **H:** 2" **WT:** 1.8

STOCK #	DESC.	1+EA
31022-PS	5V/30A Switching Supply	$22.95
31024-PS	24V/6.5A Switching Supply	$22.95

200W INDUSTRIAL SUPPLY



Input: 120/240VAC 50/60Hz (Switch Select)
Output: See Below
Specifications/Features:
Enclosed regulated switching supply. Over Voltage & Current protected. LED output indicator. Terminal strip In/Out. CE listed

L: 7.83" **W:** 4.33" **H:** 2" **WT:** 2

STOCK #	DESC.	1+EA
31025-PS	5V/40A Switching Supply	$29.95
31026-PS	12V/16.5A Switching Supply	$29.95
31027-PS	24V/8.3A Switching Supply	$29.95

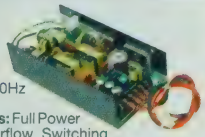
1KVA LINE STABILIZER

P/N: ATVR-1000
Input: 80-140/180-240VAC 50-60Hz
Output: 110V & 220V AC1KVA+-4%
Specifications/Features:
Micro processor controlled, Benchtop autoregulator for AC line. Automatically compensates for input line voltage variations. Front panel analog meters & power switch, input voltage switch. 110 & 220 AC sockets, fuse,& cord on back. Ideal for testing 110 & 220 equipment. 6ft AC line cord input

W: 9-1/2" **H:** 7-1/4" **W:** 5-1/2" **WT:** 15.1

STOCK #	DESC.	1EA	5+EA
14834-PS	1KVA Stabilizer	$62.95	$56.95

24V @ 12A SUPPLY



MFG: LHV
P/N: TEK300UPSD
Input: 100-240 VAC 50/60Hz
Output: 24VDC @ 12A
Specifications/Features: Full Power Requires 30CFM Min. Airflow. Switching supply with overvoltage & current limit protection. Terminal strips for Input & Output. Removable factory harness. Connector for Fan & remoteSense, Power Good, Remote shutdown . UL/us/canada/TUV/CE listed. ROHS Compliant

L: 7" **W:** 3-7/8" **T:** 2" **WT:** 2

STOCK #	DESC.	1EA
30466-PS	24V @ 12A LHV Supply	$34.95

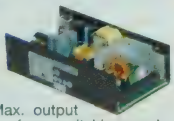
3 OUTPUT SUPPLY

MFG: EOS
P/N: VLT130-3100-S2
Input: 90-263 VAC 47-63Hz
Output #1: +3.3V @ 16A **#2:** +5V @ 14A **#3:** +12V @ 1.5A
Specifications/Features: Requires 32CFM cooling. Power Fail output, Remote Sense on #1 & 2 Outputs, Current share for paralleling (#1 & #2) Over current protection. Header Pins AC Input, Terminal Strip Outputs, Header for Share & remote Sense connections. UL/canada/usa/VDE/CE Listed.

L: 5" **W:** 3" **T:** 1" **WT:** .6

STOCK #	DESC.	1EA
18090-PS	3 Output EOS Supply	$9.95

24V/8.4A SUPPLY



MFG: MULTICOMP
P/N: MC13592
Input: 115/240VAC 50/60Hz
Output: 24VDC @ 8.4A Max.
Specifications/Features: Max. output 200W with 24CFM Airflow. Open frame switching supply. +-.5% Line /2.0% Load Regulation, Current Limit, Remote Sense, Fan connector. No minimum load, Rated to 70 Deg. "C". UL/canada/usa/TUV/CE listed.

L: 9" **W:** 5" **H:** 2-9/16" **WT:** 2.7

STOCK #	DESC.	1EA
18423-PS	24V/8.4 A Supply SALE	$49.95

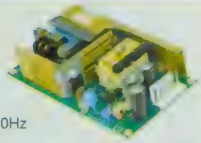
24V @ 1A SUPPLY

MFG: POWER-ONE
P/N: SP612
Input: 115/230 VAC 50/60Hz
Output: 24VDC @ 1A
Specifications/Features: Switching supply with overvoltage & current limit protection. 6" wire input leads. 4in. output leadswith header socket. UL/CSA/TUV listed.

L: 5" **W:** 3" **T:** 1-1/2" **WT:** .55

STOCK #	DESC.	1EA	12+EA
18289-PS	24V @1A Power-1 Supply	$9.95	$8.95

24V @ 2.5A SUPPLY



MFG: XP POWER
P/N: ECM60US24
Input: 100-240VAC 50-60Hz
Output: 24VDC @ 2.5A
Specifications/Features: USED Open frame Switching power supply. .5% Line/1% Load Regulation. Header Pins in & out. CSA/TUV/CE Listed.

L: 4-1/4" **W:** 2-1/2" **T:** 1-1/2" **WT:** .4

STOCK #	DESC.	1EA
31485-PS	24V @ 2.5A Power Supply	$8.95

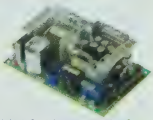
12V @ 5.4A SUPPLY

MFG: UMEC
P/N: UP0651S-02
Input: 100-240 VAC 47-63Hz
Output: 12VDC @ 5.4A
Specifications/Features: Open frame Switching supply with overvoltage & current limit protection. 0.5% Line/1% Load regulation. Header Pins Input & Output. UL/CSA/TUV/CE listed.

L: 5" **W:** 3" **T:** 1-1/8" **WT:** .6

STOCK #	DESC.	1EA	30+EA
30343-PS	12V/5.4A UMEC Supply	$12.95	$10.95

+5V, +/-12VDC SUPPLY



MFG: POWER-ONE
P/N: MAP140-3000P
Input: 100-240VAC 50/60Hz
Outputs: #1: +5.1V @ 20A **#2:** +12V @ 4A **#3:** -12V @ 1A
Specifications/Features: 140W max @ 200LFM airflow Open frame, regulated switching supply. Over current protection. Header pins in & out. UL/CSA/TUV listed.

L: 7" **W:** 4-1/4" **H:** 2" **WT:** 1.6

STOCK #	DESC.	1EA	10+EA
18835-PS	3 Output Power-One	$24.95	$22.95

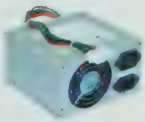
12V/4A DC BRUTE SUPPLY

Input: 115VAC 60Hz
Output: 12VDC@ 4A
Specifications/Features: Unregulated DC supply designed for use in custom equipment. Open supply has attached 2 wire line cord with in line panel mount switch. 4in. output wires with socket pin housing.

L: 4-7/8" **W:** 2-1/2" **HT:** 2-1/4" **WT:** 2.5

STOCK #	DESC.	1EA
17636-PS	12V/4A Brute Supply	$7.95

5V,25A SUPPLY



MFG: HIGH PERFECTION TECH.
P/N: HS250-PS2
Input: 115/230VAC 50/60Hz
Outputs: #1: +5VDC @ 25A **#2:** +5VSB @ .5A
Specifications/Features: ATX form factor switching supply. Standard IEC input and output power connectors on back. Single 2 X 10 (20) socket output motherboard connector.

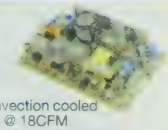
Pins: 1,2,10,11,12,18: No Conn.
Pins: 3,5,7,13,15,16,17: Common (Black)
Pins: 4,6,19,20: +5V (Red)
Pin 8: "Power Good" (Orange)
Pin 9: +5VSB (Violet)
Pin:14: "Power On" (Green)

SUPPLY MUST HAVE LOAD TO OPERATE
Connect "Power On" (Green) to Common(Black) to activate supply

W: 5-15/16" **L:** 4-3/4" **H:** 3-3/8" **WT:** 3.7

STOCK #	DESC.	1EA
18962-PS	5VDC/25A HPT Supply	$24.95

15V/3A POWER SUPPLY

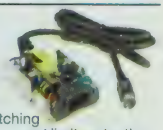


MFG: MEANWELL
P/N: PS-45-15
Input: 100-240VAC 50-60Hz
Output: 15VDC @ 3A 45W Convection cooled 52W max Fan cooled @ 18CFM
Specifications/Features: Open frame Switching power supply. 1% line/2.0% load Regulation. Over Voltage & Current protected. Header Pins in & out. UL/us/canada/TUV/CE Listed.

L: 5" **W:** 3" **T:** 1-1/2" **WT:** .4

STOCK #	DESC.	1EA
31506-PS	15V 3A Meanwell Supply	$9.95

5V & +-12V SUPPLY



MFG: AULT
P/N: SC305
Input: 100-250 VAC 50-60Hz
Outputs: #1: +5V@2A **#2:** +12V@.8A **#3:** -12V@.4A
Specifications/Features: Switching board supply with overvoltage & current limit protection. Standard IEC Type C14 input connector. 6ft output cord with ferrite filter & 5 pin DIN connector. UL/CSA/TUV/CE listed. Power Cord not included. **ORDER CORD: Stock # 7378-WI**

L: 4-1/8" **W:** 2-3/8" **H:** 1-1/4" **WT:** .72

STOCK #	DESC.	1EA
31396-PS	+ 5V & +-12V Supply	$2.95

+-5V & 12V SUPPLY

MFG: ARTESYN
P/N: NFN40-7607
Input: 100-240 VAC 47-440Hz
Outputs: #1: +5V @ 3A **#2:** +12V@ 2A **#3:** -5V @ .35A
Specifications/Features: Open switching supply. .2% Line/2% Load Reg +5V, 5% others. Over current protected. Header pins In/Out. UL/CSA/VDE listed

L: 5" **W:** 3" **H:** 1-1/4" **WT:** .7

STOCK #	DESC.	1EA
17721-PS	+ &-5V & +12V Supply	$5.95

5V/12A POWER SUPPLY

MFG: SPC TECH.
P/N: SPC11486
Input: 100/120/220-240VAC 47-63Hz
Output: 5V @ 12A
Specifications/Features: Open frame linear supply, UL/CSA/TUV/CE listed+-.05% Regulation, Full rated to 50°C, Foldback Current Limit, no minimum load, Remote Sense, UL/CSA/TUV/CE listed.

L: 9" **W:** 4-15/16" **T:** 3-1/4" **WT:** 7.8

STOCK #	DESC.	1EA
17638-PS	5V@10A Power Supply	$24.95

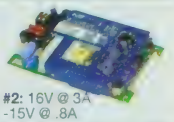
24V @ 2.1A SUPPLY

MFG: CONDOR
P/N: GL50-24
Input: 100-240VAC 50-60Hz
Output: 24VDC @ 2.1A
Specifications/Features: USED Open frame Switching power supply. 2% total Regulation. 100mA min load. Header Pins in & out. UL/us/canada/TUV/CE Listed.

L: 4-1/4" **W:** 2-1/2" **T:** 1-1/2" **WT:** .42

STOCK #	DESC.	1EA
31486-PS	24V @ 2.5A Condor Supply	$8.95

LOW PROFILE QUAD SUPPLY

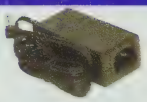


MFG: EOS
P/N: VLT100-4002
Input: 100-240 VAC 50/60Hz
Outputs: #1: +5VDC @ 12A **#2:** 16V @ 3A **#3:** -5V @ .8A **#4:** -15V @ .8A
Specifications/Features: Open switching supply with overvoltage & current limit protection. .3% line, 3% load reg. (+5V, 5% on others) Header pin In/Out. UL/usa/canada/TUV/CE listed.

L: 5" **W:** 3" **H:** 1" **WT:** .6

STOCK #	DESC.	1EA	10+EA
15560-PS	Quad EOS Supply	$14.95	$12.95

3.6V @ 2.2A SUPPLY



MFG: KETI
P/N: SA06-8S03R-V
Input: 100 -240VAC 50- 60Hz
Output: 3.6VDC @ 2.2A
Specifications/Features: Desktop switching supply with overvoltage & current limit protection. IEC input AC connector, 6ft output cord with **4mm OD/1.7mm ID** coaxial plug Center +. LED power indicator. UL/canada/usa/TUV/CE RoHS listed. POWER CORD NOT INCLUDED. ORDER POWER CORD: Stock # 7378 WI

L: 3-3/4" **W:** 2" **T:** 1-3/8" **WT:** .41

STOCK #	DESC.	1EA
18357-PS	3.6V @2.2A Supply	$4.95

5V @ 2A SUPPLY

MFG: CISCO
P/N: AD5/2A
Input: 100-120 VAC 47-63Hz
Output: 15VDC @ 2A
Specifications/Features: USED Switching plug supply with overvoltage & current limit protection. Non-Polarized 2 blade input. 6ft output cord with 10mm X 5.5/2.5mm ID coaxial plug Center +. CE listed. RoHS

L: 2-1/4" **W:** 1-7/8" **T:** 1" **WT:** .26

STOCK #	DESC.	1EA
19530-PS	5V @ 2A Cisco Supply	$5.95

5V @ 4A SUPPLY

MFG: OPENPEAK
P/n: OP 20004
Input: 90-132 VAC 60Hz
Output: 5VDC @ 4A
Specifications/Features: Switching plug supply with overvoltage & current limit protection. Non-Polarized 2 blade input. 6ft output cord with 10mm X 5.5/2.1mm ID Right Angle coaxial plug Center +. UL/canada/usa/listed. RoHS compliant.

H: 3-3/8" **W:** 1-1/2" **T:** 2-1/4" **WT:** .3

STOCK #	DESC.	1EA
18520-PS	5V @ 4A Plug Supply	$6.95

6V @ .4A SUPPLY

MFG: FRIWO
Input: 100-240VAC 50/60Hz
Output: 6VDC @ .4A
Specifications/Features: Switching plug supply with overvoltage & current limit protection. Non-Polarized 2 blade input. 6ft output cord with 5.5/2.1mm ID coaxial right angle plug Center +. UL/canada/usa listed.

L: 2-3/4" **W:** 1-15/16" **T:** 5/8" **WT:** .21

STOCK #	DESC.	1EA
18475-PS	6V @.4A Plug Supply	$4.95

12V @ 750MA PLUG SUPPLY

MFG: MOTOROLA
P/N: MT20-21120-A04F
Input: 110-127 VAC 60Hz
Output: 12VDC @ 750mA
Specifications/Features: Switching Plug supply with overvoltage & current limit protection. Non polarized 2 blade input. 46ft output cord with 10mm L X 5.5mm/2.1mm ID coaxial plug Center +. UL/canada/usa listed.

L: 2-3/4" **W:** 1-3/4" **D:** 1-3/16" **WT:** .2

STOCK #	DESC.	1EA
31171-PS	12V @ .75A Plug Supply	$2.95

12V @ 1.5A SUPPLY

MFG: TEN PAO
P/N: S018BU1200150
Input: 100-240 VAC 50/60Hz
Output: 12VDC @ 1500mA (1.5A)
Specifications/Features: USED Switching plug supply with overvoltage & current limit protection. Non-Polarized 2 blade input. 6ft output cord with 10mm L X 5.5/2.5mm ID coaxial plug Center +. UL/canada/usa listed.

L: 2-7/8" **W:** 1-3/4" **T:** 1-1/2" **WT:** .3

STOCK #	DESC.	1EA
18668-PS	12V @1.5A Plug Supply	$6.95

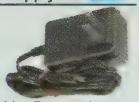
USB 5V @ 1A SUPPLY

MFG: AK TECH. for TOMTOM
P/N: A05T2-05MU
Input: 100-240 VAC 47/63Hz
Output: 5VDC @ 1A
Specifications/Features: Switching plug supply with additional interchangeable line plugs for: US, The EU, Australia and Britain, overvoltage & current limit protection. Non-Polarized input, USB Type A Female for output. includes 4ft USB Type A Male to USB Mini-B Male. UL/canada/usa/TUV/GP/CE listed.

L: 2-1/8"Body/us **W:** 1-3/4" **D:** 1-1/8" **WT:** .4

STOCK #	DESC.	1EA
18608-PS	5V @1A Universal Supply	$3.95

5V @ 2A SUPPLY

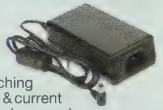


MFG: LEADER
P/N: MT15-5050200-A1
Input: 100-120VAC 50-60Hz
Output: 5VDC @ 2A
Specifications/Features: USED Switching Power adapter. 2 Blade input, 6ft output cord with 10mm L. X 3.8mm/1.35mm ID coaxial plug, Center +. UL/us/canada Listed.

H: 2-3/4" **W:** 1-7/8" **T:** 1-1/2" **WT:** .35

STOCK #	DESC.	1EA
31484-PS	5V @ 2A Leader Supply	$2.95

5V @ 4A SUPPLY



MFG: PHIHONG
P/N: PSA30U-050
Input: 100-240 VAC 50/60Hz
Output: 5VDC @ 4A
Specifications/Features: Switching adapter supply with overvoltage & current limit protection. Std. IEC C14 input connector. 5ft output cord with 10mm X 5.5/2.1mm ID Rt. Angle coaxial plug, Center +. UL/us/canada/TUV/CE listed. POWER CORD NOT INCLUDED. ORDER : Stock #7378 WI

L: 4-1/2" **W:** 2-3/8" **T:** 1-3/8" **WT:** .7

STOCK #	DESC.	1EA
30335-PS	5V @ 4A Phihong Supply	$6.95

9V @ 1.0A SUPPLY

MFG: KENWOOD
Input: 100-240 VAC 47-63Hz
Output: 9VDC @ 1.0A
Specifications/Features: Switching Plug supply with overvoltage & current limit protection. Non-polarized 2 blade input connector. 6ft output cord with **4.7mm OD/1.7mm ID** coaxial plug Center +. UL/us/canada Listed

H: 3" **W:** 1-3/8" **D:** 1" **WT:** .17

STOCK #	DESC.	1EA
19463-PS	9V/1.0A Kenwood Supply	$2.95

12V @ 1.0A SUPPLY

MFG: HON-KWANG
Input: 100-240 VAC 50/60Hz
Output: 12VDC @ 1.0A
Specifications/Features: International Switching Plug supply with overvoltage & current limit protection. Non-polarized 2 blade input connector. 6ft output cord with 10mm X 5.5 OD/2.1mm ID coaxial plug Center +. UL/us/canada/TUV/CE Listed Includes US/UK/Austr/Scandanavia AC interchangable Input plugs

H: 3" **W:** 1-3/4" **D:** 1-1/2" **WT:** .48

STOCK #	DESC.	1EA
19466-PS	12V/1.0A International Supply	$3.95

12V @ 1.67A SUPPLY

MFG: DELTA
P/N: EADP-20DB A
Input: 100-240 VAC 50/60Hz
Output: 12VDC @ 1.67A
Specifications/Features: USED, Switching adapter supply with overvoltage & current limit protection. 2 wire IEC Type 2-C8 input connector. 6ft output cord with **10mm L. X 5.5mm/1.5mm ID** coaxial plug Center +. UL/canada/usa/CE listed. **Power Cord not included. ORDER: Stock #15447-CB**

L: 4-1/2" **W:** 2" **D:** 1-1/8" **WT:** .36

STOCK #	DESC.	1EA
30262-PS	12V @ 1.67A Delta Supply	$9.95

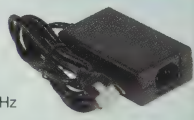
5V @ 2A SUPPLY

MFG: H/P
P/N: L2056-60001
Input: 100-240 VAC 50-60Hz
Output: 5VDC 2A
Specifications/Features: Switching desktop supply with overvoltage & current limit protection. Non-Polarized 2 wire IEC Type 2- input connector. 6ft output cord with **10mm X 4mmOD/1.7mm ID** coaxial plug Center +. UL/canada/usa/TUV/CE listed. POWER CORD NOT INCLUDED. ORDER CORD: Stock # 15447-CB

L: 3-5/8" **W:** 1-5/8" **H:** 1-1/8" **WT:** .28

STOCK #	DESC.	1EA	10+EA
18448-PS	5V @ 2A h/p Supply	$8.95	$7.95

5V @ 4A SUPPLY

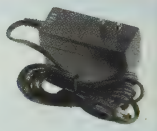


MFG: DELTA for CISCO
P/N: 34-1524-02
Input: 100-240 VAC 50-60Hz
Output: 5VDC 4A
Specifications/Features: Switching adapter supply with overvoltage & current limit protection. IEC input AC connector. 4ft output cord with 8Pin (2X4) Molex "Micro-Fit" connector. UL/canada/usa/CE listed. POWER CORD NOT INCLUDED. ORDER CORD: Stock # 7378-WI

L: 4-1/2" **W:** 2-1/2" **H:** 1-3/16" **WT:** .7

STOCK #	DESC.	1EA	30+EA
18464-PS	5V @ 4A Cisco Supply	$5.95	$4.95

6V @1A SUPPLY



MFG: DVE
P/N: DSA-006-05A
Input: 90-132 VAC 47-63Hz
Output: 6VDC @ 1A
Specifications/Features: Switching Plug supply with overvoltage & current limit protection. Non-polarized 2 Blade input. 6ft output cord with 10mm X 5.5/2.5mm ID coaxial plug Center +. UL/us/canada listed.

L: 2-7/8" **W:** 1" **T:** 1-3/4" **WT:** .32

STOCK #	DESC.	1+EA
31508-PS	6V @ 1A DVE Plug Supply	$2.95

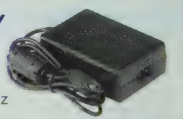
12V @ 1.25A SUPPLY

MFG: DELTA
P/N: EADP-15PB-B
Input: 100-240 VAC 50/60Hz
Output: 12VDC @ 1.25A
Specifications/Features: Switching Desktop supply with overvoltage & current limit protection. 3 wire IEC Type 1-C6 input connector. 6ft output cord with 10mm L. X 5.5mm/2.5mm ID coaxial plug, Center +. UL/canada/usa/TUV/CE listed. **Power Cord not included. ORDER CORD: Stock #18069-CB**

L: 3-1/2" **W:** 2-3/8" **D:**1-3/16" **WT:** .4

STOCK #	DESC.	1EA
31825-PS	12V @ 1.25A Delta Supply	$4.95

12V @ 2A SUPPLY



MFG: MOTOROLA
P/N: PB-1240-02A-ROHS
Input: 100-120 VAC 47-63Hz
Output: 12VDC @ 2A
Specifications/Features: USED, Switching adapter supply with overvoltage & current limit protection. Polarized 2 wire input connector. 5ft output cord with 10mm L. X 5.5mm/2.1mm ID coaxial plug Center +. UL/canada/usa listed. **Power Cord not included. ORDER CORD: Stock #15449-CB**

L: 3-1/2" **W:** 2-3/8" **T:** 1-3/16" **WT:** .42

STOCK #	DESC.	1EA
30229-PS	12V @ 2A Motorola Supply	$4.95

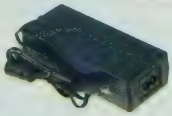
12V @ 2A SUPPLY

MFG: MICROSOFT
P/N: PSC24W-120
Input: 100-120 VAC 47-63Hz
Output: 12VDC @ 2A
Specifications/Features: Switching adapter supply with overvoltage & current limit protection. Non-polarized 2 wire IEC Type 2-C8 input connector. 5ft output cord with 10mm EIAJ-4 Plug (5.5mm outer/3.4 inner and a 1mm ctr. Pin) Center +. UL/us/canada/TUV/CE listed.
Power Cord included

L: 3-3/4" **W:** 2" **T:** 1-3/8" **WT:** .7

STOCK #	DESC.	1EA
31826-PS	12V @ 2A Microsoft Supply	$5.95

12V @ 3A SUPPLY



MFG: 2WIRE
P/N: PSM36W-120TW
Input: 100-240 VAC 50/60Hz
Output: 12VDC @ 3A
Specifications/Features: USED, Switching adapter supply with overvoltage & current limit protection. Non-Polarized 2 wire IEC Type 2-C8 input connector. 3ft output cord with 10mm L. X 5.5mm/2.1mm ID coaxial plug, Center +. UL/canada/usa listed. **Power Cord not included. ORDER CORD: Stock #15447-CB**

L: 4-5/8" **W:** 2" **D:** 1-1/4" **WT:** .5

STOCK #	DESC.	1EA
30267-PS	12V @ 3A 2Wire Supply	$4.95

12V @ 3A SUPPLY

MFG: LEADER
P/N: NU30-4120250-I3
Input: 100-240 VAC 50/60Hz
Output: 12VDC @ 3A
Specifications/Features: Switching Adapter supply with overvoltage & current limit protection. Non-Polarized 2 wire IEC Type 2-C8 input connector. 5ft output cord with 10mm L. X 5.5mm/2.1mm ID Right Angle coaxial plug Center +. CE listed. Includes Power Cord

L: 4-1/4" **W:** 1-3/4" **D:**1-1/4" **WT:** .62

STOCK #	DESC.	1EA
31870-PS	12V @ 3A Leader Supply	$6.95

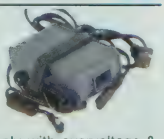
12V @ 3.5A SUPPLY

MFG: MOTOROLA
P/N: PB-1500-01A-ROHS
Input: 100-120 VAC 50/60Hz
Output: 12VDC @ 3.5A
Specifications/Features: USED, Switching adapter supply with overvoltage & current limit protection. Polarized 2 wire input connector. 5ft output cord with 10mm L. X 5.5mm/2.1mm ID coaxial plug Center +. UL/canada/usa listed. **Power Cord not included. ORDER CORD: Stock #15449-CB**

L: 5-7/8" **W:** 2-1/4" **D:** 1-1/4" **WT:** .7

STOCK #	DESC.	1EA	50EA
30266-PS	12V @ 3.5A Motorola Supply	$4.95	

12V @ 5A SUPPLY

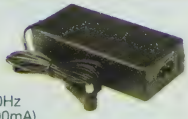


MFG: SL Power for Respironics
P/N: MWR115RA1200N05
Input: 100-240 VAC 50-60Hz
Output: 12VDC @ 5A
Specifications/Features:
USED, Switching adapter supply with overvoltage & current limit protection. Designed for Respironics CPAP units. IEC Type 2-C8 input connector. 4ft. Output cord with 10mm X mm Rt. Ang. Coaxial Plug 5.5mmO/D X 2.5mmI/D. UL/canada/usa/TUV/CE listed. **POWER CORD INCLUDED.**

L: 4-3/4" **W:** 3" **H:** 1-3/4" **WT:** 1.2

STOCK #	DESC.	1EA
31336-PS	12V @ 5A SL Power Supply	$8.95

12V @ 2.5A SUPPLY



MFG: DELTA
P/N: EADP-30FB A
Input: 100-240 VAC 50/60Hz
Output: 12VDC @ 1A (1000mA)
Specifications/Features: USED, Switching supply with overvoltage & current limit protection. 2 wire IEC Type 2-C8 input connector. 6ft output cord with 10mm L. X 5.5mm/2.1mm ID Rt. Angle coaxial plug Center +. UL/canada/usa/CE listed. **Power Cord not included. ORDER CORD: Stock #15447-CB**

L: 4-3/4" **W:** 2" **D:** 1-1/4" **WT:** .42

STOCK #	DESC.	1EA
30226-PS	12V2.5A Delta Supply	$5.95

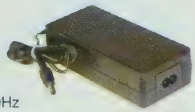
12VDC @ 3A SUPPLY

MFG: CONDOR
P/N: SA-123A0P
Input: 100-240VAC 50-60Hz
Output: 12VDC @ 3A
Specifications/Features: Regulated, switching power adapter. Non-polarized 2 Blade input, 6ft. output cord with a 10 mm long X 5.5mm/2.1mm coaxial connector Center Positive. UL/us/canada/CE Listed.

L: 2-3/4" **W:** 1-5/8" **T:** 1-1/2" **WT:** .36

STOCK #	DESC.	1EA
31830-PS	12VDC, 3A Condor Adapter	$7.95

12V @ 3A SUPPLY



MFG: PACE
P/N: EADP-36FB A
Input: 100-240 VAC 50/60Hz
Output: 12VDC @ 3A
Specifications/Features: USED, Switching Adapter supply with overvoltage & current limit protection. Non-Polarized 2 wire IEC Type 2-C8 input connector. 3ft output cord with 10mm L. X 5.5mm/2.1mm ID coaxial plug Center +. UL/canada/usa listed. **Power Cord not included. ORDER CORD: Stock #15447-CB**

L: 5-1/4" **W:** 2-1/2" **D:**1-1/2" **WT:** .6

STOCK #	DESC.	1EA
30272-PS	12V @ 3A Pace Supply	$5.95

12V @ 4.16A SUPPLY

MFG: AULT for Respironics
P/N: MW115RA1200N02
Input: 100-240 VAC 50-60Hz
Output: 12VDC @ 4.16A
Specifications/Features:
USED, Adapter switching desktop supply with overvoltage & current limit protection. Designed for Respironics CPAP units. IEC Type 2-C8 input connector. 5ft. Output cord with 10mm X 5.5/2.5mm Rt. Ang. plug UL/canada/usa/TUV/CE listed, **POWER CORD INCLUDED.**

L: 4-3/4" **W:** 3" **H:** 1-7/8" **WT:** 1.1

STOCK #	DESC.	1EA
18948-PS	12V @ 4.16A Ault Supply	$14.95

12V @ 5A SUPPLY

MFG: EMERSON for Respironics
P/N: AA24750L-001
Input: 100-240 VAC 50-60Hz
Output: 12VDC @ 5A
Specifications/Features:
USED, Switching adapter supply with overvoltage & current limit protection. Designed for Respironics CPAP units. IEC Type 2-C8 input connector. 4ft. Output cord with 10mm X 5.5/2.5mm Rt. Ang. plug UL/canada/usa/TUV/CE listed, **POWER CORD INCLUDED.**

L: 4-3/4" **W:** 3" **H:** 1-3/4" **WT:** 1

STOCK #	DESC.	1EA
31335-PS	12V @ 5A Emerson Supply	$8.95

12V @ 2.5A SUPPLY

MFG: LEADER
P/N: NU30-4120250-13
Input: 100-120 VAC 47-63Hz
Output: 12VDC @ 2.5A
Specifications/Features: USED, Switching adapter supply with overvoltage & current limit protection. Non-polarized 2 wire IEC Type 2-C8 input connector. 5ft output cord with 10mm X 5.5/2.1mm ID coaxial plug Center +. UL/us/canada/CSA/CE listed. **Power Cord not included. ORDER CORD: 15447-CB**

L: 4-1/2" **W:** 1-7/8" **T:** 1-3/8" **WT:** .44

STOCK #	DESC.	1EA
30201-PS	12V @ 2.5A Leader Supply	$9.95

12V @ 3A SUPPLY

Input: 100-240 VAC 50/60Hz
Output: 12VDC @ 3A
Specifications/Features: Switching adapter supply with overvoltage & current limit protection & LED indicator. Non-polarized 2 wire IEC Class 2 Type C8 input connector. 5ft output cord with ferrite filter and 5.5/2.5mm ID/ 10mm coaxial plug Center +. UL/canada/us/CE listed. **POWER CORD INCLUDED.**

L: 4-3/4" **W:** 2-1/8" **H:** 1-1/4" **WT:** .64

STOCK #	DESC.	1EA
19493-PS	12V @ 3A Desktop Supply	$11.95

12V @ 3.5A SUPPLY

MFG: MOTOROLA
P/N: EADP-42BB A
Input: 100-120 VAC 50/60Hz
Output: 12VDC @ 3.5A
Specifications/Features: USED, Switching Adapter supply with overvoltage & current limit protection. Polarized 2 wire input connector. 5ft output cord with 10mm L. X 5.5mm/2.1mm ID coaxial plug Center +. UL/canada/usa listed. **Power Cord not included. ORDER CORD: Stock #15449-CB**

L: 5-7/8" **W:** 2-1/2" **D:** 1-3/8"**WT:** .8

STOCK #	DESC.	1EA
30265-PS	12V @ 3.5A Motorola Supply	$5.95

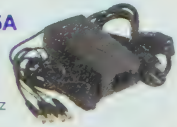
12V @ 5A SUPPLY

MFG: DELTA
P/N: EADP-48FB-A
Input: 100-240 VAC 50-60Hz
Output: 12VDC @ 5A
Specifications/Features: Switching adapter supply with overvoltage & current limit protection. Non-polarized 2 wire IEC Type 2-C8 input connector. 5ft output cord with 10mm X 5.5/2.5mm ID coaxial plug Center +. TUV/CE listed. Power Cord included

L: 5" **W:** 2" **T:** 1-1/4" **WT:** .64

STOCK #	DESC.	1EA
31869-PS	12V @ 5A Leader Supply	$9.95

4 OUTPUT 12V @5A SUPPLY



P/N: 264-2250-4
Input: 100-240 VAC 50/60Hz
Output: +12V @ 5A
Specifications/Features: Adapter switching supply. Over current protection. Std. IEC input connector. 5ft. output cable with 4 12mm X 5.5/2.1mm coaxial connectors split off 18" from ends.
POWER CORD INCLUDED.

H: 4-5/8" **W:** 2-1/4" **D:** 1-1/2" **WT:** .6

STOCK #	DESC.	1EA
30392-PS	12VDC Camera Supply	$17.95

16V @ 4.5A SUPPLY

MFG: LENOVA/IBM
P/N: 92P1020
Input: 100-240VAC 50-60Hz
Output: 16VDC @ 4.5A
Specifications/Features: Think Pad Switching Power adapter. Non-Polarized 2 wire IEC Type 2-C8 input connector. 6ft output cord with 10mm L. X 5.5mm/2.5mm ID coaxial plug, Center +. UL/us/canada/CSA/TUV/CE Listed. **Power Cord NOT included. ORDER CORD: Stock # 15447-CB**

L: 5" **W:** 2" **T:** 1-1/8" **WT:** .9

STOCK #	DESC.	1EA
31476-PS	16V @ 4.5A IBM Supply	$9.95

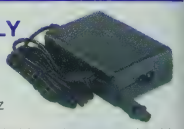
16V @ 3.36A SUPPLY

MFG: FUJITSU
P/N: CA01007-0610
Input: 100-240 VAC 47-63Hz
Output: 16VDC @ 3.36A
Specifications/Features: Switching Adapter supply with overvoltage & current limit protection Non-polarized 2 wire IEC Type 2-C8 input connector. 6ft output cord with ferrite filter & with EIAJ-5320A Type 5 Right Angle Connector **(6.5mmOD with 1.4mm ctr. pin)** Center +. UL/canada/usa/TUV/CE listed. **Power Cord not included. ORDER CORD: Stock # 15447-CB**

L: 4-1/4" **W:** 2-3/8" **H:** 1-1/4" **WT:** .8

STOCK #	DESC.	1EA
18468-PS	16V @ 3.36A Fujitsu Supply	$14.95

16V @ 3.75A SUPPLY



MFG: SYN ELECTRONICS
P/N: SYS2011-6016
Input: 100-240 VAC 50-60Hz
Output: 16VDC @ 3.75A
Specifications/Features: Switching adapter supply with overvoltage & current limit protection Non-polarized 2 wire IEC Type 2-C8 input connector. 6ft output cord with ferrite filter & unknown 4 pin mini connector. UL/canada/usa/TUV/CE listed. **Power Cord not included. ORDER CORD: Stock # 15447-CB**

L: 4" **W:** 2-1/2" **H:** 1-1/4" **WT:** .66

STOCK #	DESC.	1EA
19385-PS	16V @ 3.75A Laptop Supply	$8.95

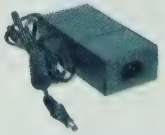
16V @ 3.5A SUPPLY

MFG: DELTA for IBM/LENOVO
P/N: 02K6807 93P5022
Input: 100-240 VAC 50/60Hz
Output: 16VDC @ 3.5A
Specifications/Features: Switching adapter for use as replacement for laptop computers. Overvoltage & current limit protection. Polarized 3 wire IEC Class 1 Type C6 input connector. 3ft output cord with ferrite filter & 11 mm long X 5.5mm/2.5mm coaxial connector. ULc/us/TUV/CE Listed. **Power Cord not included. ORDER CORD: Stock # 18069-CB**

L: 4" **W:** 2" **H:** 1-1/8" **WT:** .75

STOCK #	DESC.	1EA
31102-PS	16V @ 3.5A Laptop Supply	$9.95

16.3V @ 1.84A SUPPLY



Input: 100-240VAC 50-60Hz
Output: 16.3VDC @ 1.84A
Specifications/Features: USED, Switching Power adapter. Std. IEC C13 input connector. 4ft output cord with 10mm L. X 5.5mm/2.1mm ID coaxial plug, Center - (Minus). UL/CSA Listed. **Power Cord NOT included. ORDER CORD: Stock # 7378-WI**

L: 5" **W:** 2-1/2" **T:** 1-1/2" **WT:** .82

STOCK #	DESC.	1EA
31482-PS	16V @ 1.84A Supply	$3.95

16.5V @ 3.36 SUPPLY

P/N: PA1700-02I
Input: 100-240 VAC 50/60Hz
Output: 16.5VDC @ 3.36A
Specifications/Features: Switching desktop supply for use as replacement for laptop computers. Overvoltage & current limit protection. Polarized 3 wire IEC Class 1 Type C6 input connector. 3ft output cord with ferrite filter & 12 mm long X5.5/2.5mm coaxial connector Center. CE Listed.Power Cord not included.ORDER POWER CORD: Stock # 18069-CB

L: 4-1/2 **W:** 2" **T:** 1-1/4" **WT:** .42

STOCK #	DESC.	1EA
18505-PS	16.5V @ 3.36A Supply	$8.95

18V @ 1A SUPPLY

MFG: FRANMAR
P/N: FRA018-S18-4
Input: 100-240 VAC 50/60Hz
Output: 18VDC @ 1A
Specifications/Features: Switching adapter supply with overvoltage & current limit protection. Std. 3 wire IEC Type C13 input connector. 5ft output cord with 10mm X 5.5/2.5mm ID coaxial plug Center +. UL/us/canada/TUV/CE listed. ROHS. **Power Cord not included. ORDER CORD: Stock # 7378 WI**

L: 4-1/4" **W:** 1-5/8" **T:** 1-1/4" **WT:** .4

STOCK #	DESC.	1EA
31221-PS	18V @ 1A FranMar Supply	$5.95

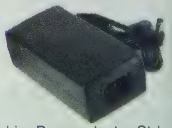
18V @ 1A SUPPLY

MFG: ARIANA
P/N: ALL-181WU-18
Input: 100-240 VAC 50/60Hz
Output: 18VDC @ 1A
Specifications/Features: Switching plug supply with overvoltage & current limit protection. Non-Polarized 2 blade input. 6ft output cord with **3.5mm OD/1.3mm ID** coaxial plug Center +. UL/canada/usa listed.

L: 2-7/8" **W:** 2" **T:** 1-5/8" **WT:** .4

STOCK #	DESC.	1EA
18253-PS	18V @1A Plug Supply	$6.95

18V @ 3.4A SUPPLY



MFG: CONDOR
P/N: SA-184A4I
Input: 100-240VAC 50-60Hz
Output: 18VDC @ 3.4A
Specifications/Features: Switching Power adapter. Std. IEC C13 input connector. 6ft output cord with 10mm L. X 5.5mm/2.1mm ID coaxial plug, Center +. UL/us/canada/CE Listed. **Power Cord NOT included. ORDER CORD: Stock # 7378-WI**

L: 4-5/8" **W:** 2-3/8" **T:** 1-1/2" **WT:** .8

STOCK #	DESC.	1EA
31480-PS	18V @ 3.4A Condor Supply	$7.95

18V @ 5A SUPPLY

MFG: AULT
P/N: MW116
Input: 100-240VAC 50-60Hz
Output: 18VDC @ 5A
Specifications/Features: Medical grade Switching Power adapter. Standard IEC C14 input connector, 6ft. output cord with a 4 Pin Hypertronics D01 series female jack. UL/us/canada/TUV/CE Listed. **Power Cord NOT included. ORDER CORD: Stock # 7378-WI**

L: 5-1/4" **W:** 3" **T:** 1-3/4" **WT:** 1.4

STOCK #	DESC.	1EA
31468-PD	18V @ 5A Ault Supply	$12.95

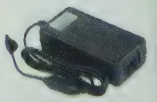
18.5V @ 3.5A SUPPLY

P/N: PCGA-AC18.5V
Input: 100-240 VAC 50/60Hz
Output: 18.5VDC @ 3.5A
Specifications/Features: Switching desktop supply for use as replacement for laptop computers. Overvoltage & current limit protection. Polarized 3 wire IEC Class 1 Type C6 input connector. 3ft output cord with ferrite filter & 11 mm long X 4.7/1.7mm coaxial connector. CE Listed. Power Cord not included.
ORDER POWER CORD: Stock # 18069-CB

L: 4-1/2" **W:** 2" **H:** 1-1/4" **WT:** .42

STOCK #	DESC.	1EA
18506-PS	18.5V @ 3.5A Supply	$8.95

19V @2.6A SUPPLY



MFG: EDAC
P/N: EM10602D
Input: 100-240 VAC 47-63Hz
Output: 19VDC @ 2.6A
Specifications/Features: Switching desktop supply with overvoltage & current limit protection. Non-polarized 2 wire IEC Type 2-C8 input connector. 6ft output cord with ferrite filter & a Hirose RP34L-5PA-2 series Bi-Pin connector. UL/canada/usa/CE listed. **Power Cord not included. ORDER CORD: Stock # 15447-CB**

L: 4-3/4" **W:** 2-3/8" **H:** 1-3/8" **WT:** .7

STOCK #	DESC.	1EA
19077-PS	19V @ 2.6A EDAC Supply	$3.95

19.5V @ 4.62A SUPPLY

MFG: LITE-ON
P/N: PA-1900-02D
Input: 100-240 VAC 50/60Hz
Output: 19.5VDC @ 4.62A
Specifications/Features: Switching adapter supply for use as replacement for Dell laptop computers. Overvoltage & current limit protection. Polarized 3 wire IEC Class 1 Type C6 input connector. 3ft output cord with ferrite filter & **7.4mm OD/5.0mm ID** round coaxial connector with **.56mm center pin. Power Cord not included. ORDER CORD: Stock # 18069-CB**

L: 6" **W:** 2-1/4" **H:** 1-3/8" **WT:** .6

STOCK #	DESC.	1EA
18507-PS	19.5V @ 4.62A Laptop Supply	$15.95

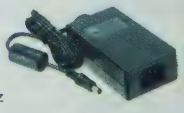
20V @3.25A SUPPLY

P/N: PCGA-AC20V
Input: 100-240 VAC 50/60Hz
Output: 20VDC @ 3.25A
Specifications/Features: Switching adapter supply for use as replacement for laptop computers. Overvoltage & current limit protection. Polarized 3 wire IEC Class 1 Type C6 input connector. 3ft output cord with ferrite filter & 13 mmlong X 5.5/2.5mm coaxial connector. UL/canada/usa/TUV/CE Listed. **Power Cord not included. ORDER CORD: Stock # 18069-CB**

L: 4-1/2" **W:** 2" **H:** 1-1/4" **WT:** .42

STOCK #	DESC.	1EA
18508-PS	20V @ 3.25A Laptop Supply	$8.95

24V @ 1A SUPPLY



MFG: PHIHONG
P/N: PSS-22U-240
Input: 100-240 VAC 50/60Hz
Output: 24VDC @ 1A
Specifications/Features: Switching adapter supply with overvoltage & current limit protection. Std. IEC C14 input connector. 5ft output cord with 10mm X 5.5/2.1mm ID coaxial plug Center +. UL/us/canada/CE listed. **Power Cord not included. ORDER CORD: Stock # CB-7378**

L: 4-1/4" **W:** 2-1/2" **T:** 1-3/8" **WT:** .7

STOCK #	DESC.	1EA
30332-PS	24V @ 1A Phihong Supply	$4.95

24V @2.2A SUPPLY

Input: 100-240 VAC 50/60Hz
Output: 24VDC @ 2.2A
Specifications/Features: Switching adapter supply with overvoltage & current limit protection. Polarized 3 wire IEC C13 input connector. 6ft output cord with ferrite filter & 12mm X 5.5/2.1mm Coaxial Plug Center +. **Power Cord not included. ORDER CORD: Stock # 7378WI**

L: 6-1/2" **W:** 3-1/8" **H:** 2-3/8" **WT:** 1.3

STOCK #	DESC.	1EA
30252-PS	24V @ 2.2A Desktop Supply	$13.95

24V @ 2.5A SUPPLY

MFG: PHIHONG
P/N: PSC60M-240
Input: 100-240 VAC 50/60Hz
Output: 24VDC @ 2.5A
Specifications/Features: Switching adapter supply with overvoltage & current limit protection. Polarized 3 wire IEC Class 1 Type C6 input connector. 4ft output cord with 10mm L. X 5.5mm/2.1mm ID coaxial plug Center +. UL/canada/usa/TUV/CE listed. **Power Cord not included. ORDER CORD: Stock #18069-CB**

L: 5" **W:** 2-3/8" **D:** 1-1/4" **WT:** .62

STOCK #	DESC.	1EA
30254-PS	24V @ 2.5A Phihong Supply	$14.95

24V @2.65 A SUPPLY

Input: 100-240 VAC 50/60Hz
Output: 24VDC @ 2.65A
Specifications/Features: Switching adapter supply for use as replacement for certain laptop computers. Overvoltage & current limit protection. Polarized 3 wire IEC Class 1 Type C6 input connector. 3ft output cord with ferrite filter & unknown connector. **Power Cord not included. ORDER CORD: Stock # 18069-CB**

L: 4-1/2" **W:** 2" **H:** 1-1/4" **WT:** .45

STOCK #	DESC.	1EA
18509-PS	24V @ 2.65A Laptop Supply	$19.95

5V & 12VDC @ 2A SUPPLY

MFG: LACIE
P/N: ACU034A-0512
Input: 100-240 VAC 50-60Hz
Output: #1: +5V @ 2A #2: +12V 2A
Specifications/Features: USED, Switching desktop supply with overvoltage & current limit protection. Non-polarized 2 wire IEC Type 2-C8 input connector. 4ft output cord with 4 Pin Kycon KPPX connector. UL/canada/usa/TUV/CE listed. **Power Cord not included. ORDER CORD: Stock # 15447-CB**

L: 4-1/4" **W:** 2" **H:** 1-1/8" **WT:** .52

STOCK #	DESC.	1EA
19072-PS	5& 12V @ 2A Desktop Supply	$8.95

5V & 12VDC @ 1.5A SUPPLY

MFG: AC BEL
P/N: AD-6008
Input: 100-240 VAC 50-60Hz
Output: #1: +5V @ 1.5A #2: +12V 1.5A
Specifications/Features: USED, Switching supply with current limit protection. Non-polarized 2 wire IEC Type 2-C8 input connector. 4ft output cord with 5 pin mini DIN connector. UL/canada/usa/TUV/CE listed. **Power Cord not included. ORDER CORD: Stock # 15447-CB**

L: 4-1/8" **W:** 2-1/4" **H:** 1-1/4" **WT:** .4

STOCK #	DESC.	1EA
18670-PS	5& 12V @1.5A Desktop Supply	$6.95

THOUSANDS more Items on www.mpja.com

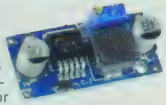
ADJ. DC/DC BOOST CONVERTER

Non Isolated, LM2577 Step up (Boost) adjustable DC/DCConverter, switching Regulator board. Ideal Point-of-Use regulator
Input: 3-34VDC
Output: 4-35VDC
Rated Current: 2A (Heatsink Above 10Woutput)
Regulation: 0.5%

L: 1-15/16" **W:** 1" **H:** 1/2" **WT:** .03

STOCK #	DESC.	1EA
30300-PS	Adj. 2A DC/DC Boost Converter	$5.95

ADJ. DC/DC BUCK CONVERTER



Non Isolated, LM2596 Step down adjustable DC/DC Converter, switching Regulator board. Ideal Point-of-Use regulator
Input: 4.5-40VDC
Output: 1.5-37VDC
Rated Current: 2A (Heatsink above 10W Output
Regulation: 0.5%

L: 1-3/4" **W:** 13/32" **H:** 1/2" **WT:** .03

STOCK #	DESC.	1EA
30148-PS	Adj. 2A DC/DC Converter	$3.95

ADJ. DC/DC CONVERTER/ METER

Non Isolated, adjustable DC/DC Buck Converter, switching Regulator with built-in 3digit LED Voltmeter. Pressing Onboard switch cycles through display of: Input, Output & press & hold for Display Off.
Regulator
Input: 4.5-40VDC Output: 1.5-37VDC
Rated Current: 2A Regulation: 0.5%
Meter
Resolution: +-0.1V Range: 4-40V
4VMin Input Volts to Board for Meter Operation

L: 2-5/8" **W:** 1-7/16" **H:** 1/2" **WT:** .06

STOCK #	DESC.	1EA
30149-PS	Adj. DC/DC Converter/Meter	$10.95

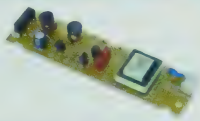
SINGLE CELL BOOSTER MODULE

Single 1.5VCell Voltage Booster
Switch mode step-up (Boost) DC/DC converter. Input voltage between 0.9 to 5VDC and get 5VDC output at up to 200mA. Use a single AA 1.2-1.5V cell to run your 5 Volt gadget. Small enough to fit in most projects. The module has two solder pads for input voltage and a USB Type A female connector for the output. Ideal for solar cell booster or charger circuit. Projects where space is important by using a single cell versus many.
Power: 0.9 – 5VDC
Output Voltage: 5VDC +/- 2%
Output Current: 100-200Ma
Efficiency: 85% (typical)
LED Power Indicator

L: 1-1/2" **W:** 5/8" **H:** 1/2" **WT:** .02

STOCK #	DESC.	1+EA
31801-P S	Single Cell 5V Boost Converter	$1.75

5V DC CCFL INVERTER

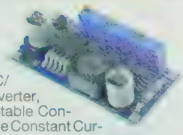


Input: 5VDC
Output: 400VAC @ 1
Inverter used to drive mini CCFL tubes in Monitors & other displays. 9 Pin input connector for ribbon cable (+,- & On/Off), 3 pin micro output connector(2 used 1 blank).

L: 4" **W:** 1" **H:** 1/2" **WT:** .04

STOCK #	DESC.	1EA
18747-PS	CCFL Inverter	$2.95

CV/CC CONVERTER

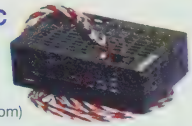


Non Isolated, adjustable DC/ DC Buck (Step Down) Converter, Driver, Regulator with adjustable Constant Voltage out or adjustable Constant Current output for charging batteries or driving LEDs
Input: 5-35VDC Output: 1.5-30VDC
Input/Output Differential: 2V min.
Rated Current: 3A (10Watt limit without Heatsink)
Current limit: adj. 0-3A sets Max current
Charge Adj. : sets the threshold of toggle the Charg/Full Charge LEDs
Regulation: 1%

L: 2" **W:** 15/16" **T:** 5/8" **WT:** .06

STOCK #	DESC.	1EA
31562-PS	Adj. Volt & Current Supply	$4.95

12V@3.8A DC/DC CONVERTER

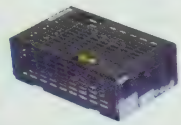


MFG: IPS
P/N: PD65-12-LC
Input: 10-30VDC (24V Nom)
Output: 12V @ 3.8A
Specifications/Features: Max. output 45W Factory Pre-Wired with 24in Output & a12ft. Input cable harness. Enclosed, DC input switching supply. 0.5% line Reg./1% load Reg, 1%P/P noise/ripple. Header pins for Input & Output connections.

L: 6-3/4" **W:** 4-1/8" **H:** 2-1/8" **WT:** 2.2

STOCK #	DESC.	1EA
18136-PS	12V@3.8A DC/DC Supply/Wired	$9.95

12V@3.8A DC/DC CONVERTER



MFG: IPS
P/N: PD65-12-LC
Input: 10-30VDC (24V Nom)
Output: 12V @ 3.8A
Specifications/Features: Max. output 45W Enclosed, DC input switching supply. 0.5% line Reg./1% load Reg, 1%P/P noise/ripple. Header pins for Input & Output connections.

L: 6-3/4" **W:** 4-1/8" **H:** 2-1/8" **WT:** 1.3

STOCK #	DESC.	1EA
18132-PS	12V@3.8A DC/DC Supply	SALE $4.95

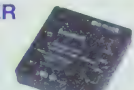
24V TO 13.8V DC/ DC CONVERTER

Input: 20-35VDC
Output: 13.8VDC @ 15A peak (1-2Min) 10A for 7Min/5A continuous.
Heavy duty, linear down converter. Used in applications where truck/boat etc. electrical system is 24V to provide 13.8VDC for Radios, and other communication systems. Isolated metal case, 6in input leads, binding posts for output. For direct connection to batteries only. Series 2 units for up to 50VDC Input, Parallel units for higher current.

L: 8" **W:** 5-3/8" **H:** 1-1/2" **WT:** 2.3

STOCK #	DESC.	1EA
9610-PS	24/12V Down Converter	SALE $14.95

5VDC/DC CONVERTER



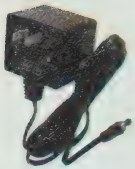
MFG: LUCENT (Now TYCO)
P/N: JC030A1-29M
Input: 18-36V DC
Output: 5V DC 6A
Specifications/Features: Sealed DC/DC converter module. .1% line/l.2%oad reg. 150mV P/P ripple, short circuit protected, remote sense, remote On/Off (Low-On/High-Off),500V isolation. UL,CSA, VDE Listed

L: 2.4" **W:** 2.28" **H:** .5" **WT:** .2

STOCK #	DESC.	1+EA
19320-PS	5V Lucent DC/DC Module	$4.95

DC OUTPUT PLUG SUPPLIES

A



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G

ALPLUG/DESKTOP SUPPLIES LISTED HERE:
120VAC/60HZ INPUT
UNREGULATED DC OUTPUT
WITH HIGH RIPPLE

STOCK #	FIG.	VOLTS	AMPS	TERMINATION (ID X OD)	LEN.	CLR.	DIM. L X W X D:	MANU./PART NUMBER	LISTED	WT.	1EA	12+EA
31208-PD	A	5VDC	.3A	5.5mm/2.1mm Coaxial- Center Pos.	6'	BLK	2" x 2-1/4" x 1"	Ault/	UL/CSA	.7	$1.95	
31206-PD	B	6VDC	.5A	5.5mm/2.1mm- Coaxial-Center Pos.	6'	BLK	2-1/2" x 1-1/4" x 1-7/8"	Ault/P35-060500-A000C	UL/CSA	.4	$1.95	-----
16228-PD	D	6VDC	.8A	5.5mm/2.5mm - Rt. Ang.Coaxial-Center Pos.	6'	WHT	2-5/8" x 2" x 1-3/4"	Otres/CX06V800	UL/CSA	.7	$4.95	-----
19534-PD	F	7.5VDC	.7A	3.8/1.3mm Coaxial-Center Pos.	6'	BLK	2-3/4" x 2" x 1-5/8"	Hon-Kwang/D75-07A-950	ULus/can.	1.3	$3.95	-----
18251-PD	G	9VDC	.7A	4.7mm/1.7mm-Rt. Ang.Coaxial-Center Pos.	5'	BLK	2-1/2" x 2" x 1-5/8"	Kenwood	UL/CSA	.61	$3.95	$3.49

J

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S

X

ALL PLUG/DESKTOP SUPPLIES LISTED HERE:
120VAC/60HZ INPUT
UNREGULATED DC OUTPUT
WITH HIGH RIPPLE

STOCK #	FIG.	VOLTS	AMPS	TERMINATION (ID X OD)	LEN.	CLR.	DIM. L X W X D:	MANU./PART NUMBER	LISTED	WT.	1EA	12+EA
17565-PD	J	12VDC	.15A	Stripped back Mini ZIP Cord	6'	WHT	2-3/8" x 1-3/4" x 1-7/8"	Lucent/4000T	UL	.4	$2.95	-----
18901-PD	O	15VDC	1A	4.7/1.7mm Coaxial - Center Pos.	5'	BLK	3-1/4" x 2-1/4" x 2"	OEM/AD-151A	ULus/c	1.3	$5.95	-----
18560-BC	S	26VDC	.21A	3.5/1.3mm Coaxial-Ctr. +	6'	BLK	3" X 2" X 1-5/8"	Black&Decker/ETPCA-180021U3	cULu	.23	$2.95	
				Actual output is 28.6NL/28V@ 200mA. Wall charger for several 18V B&D tools.								
15890-PD	X	30VDC	.4A	3' line cord/6.5mm/2.5mm Coaxial-Ctr. Neg.	5'	BLK	4-1/2'"X 2-5/8" X 2-3/16"	H/P /C2183A/9100-5195b	-----	1.4	$19.95	-----

9.6V RECHARGABLE BATTERY

Kinetic N600AA8HC shrink-wraped Ni/Cad AA cell pac. Rated: 9.6VDC @ 600mAh. 6in. leads with 2 pin micro connector.

L: 2-1/4" **W:** 1-1/8" **H:** 1-7/8" **WT:** .32

STOCK #	DESC.	1EA
18959-BT	9.6V@600mAH Ni/Cad Pack	$4.95

THOUSANDS MORE ITEMS ON MPJA.COM

BATTERY "FUEL" GAUGE

CURTIS 906T24YYBQFE, 24VDC Bargraph battery monitor. 10LED bargraph with 5 green, 3 yellow and 2 Red.
Meter tracks 24V battery from "Full" at 2.00V/Cell to "Empty" at 1.90V/cell. Long Time integration delay elimanates false readings due to spikes. at 70% discharge #2 RedLED Flashes; at 80% 2 red LEDS alternately Flash. Last reading stored at power off. .187" quick connect terminals. Output Signal: 5VDC +- .5V at 90uA Source above "Empty". 0-0.1 VDC (1V Max.) @ 90uA sink. Back panel mount, screws included.

W: 53.2mm **H:** 31.2mm **D:** 33.5mm **WT:** .1

STOCK #	DESC.	1EA
19390-ME	24V Battery "Fuel" Gauge	$19.95

RECHARGABLE BATTERIES

Sealed Lead/Acid gell cells with .187 Quick connect terminals. For general purpose use in UPS systems, Alarms, Portable lighting. 20hr capacity rating.
17280: 2.8"L X 1.9" W X 4.2" H
14817: 6"L X 1.4" W X 3.9" H
14819: 6"L X 2.6" W X 3.9" H

STOCK #	DESC.	WT.	1EA	5+EA
17280-BT	6V@4A (NP4-6)	2	$7.95	$7.45
14817-BT	6V@8A (NP8-6)	4.5	$18.95	$17.95
14819-BT	12V@7A (NP7-12)	6	$20.95	$19.95

PLUG-IN TRANSFORMERS

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C

AC OUTPUT TRANSFORMERS
ALL PLUG TRANSFOMERS 120VAC/60HZ INPUT

STOCK #	FIG.	VOLTS	AMPS	TERMINATION (ID X OD)	LEN.	CLR.	DIM. L X W X D	MANU./PART NUMBER	LISTED	WT.	1EA	12+EA
31004-PA	A	12VAC	3A	2 Pos.Screw-LED Ind.	-	White	4" x 2-5/8" x 2-1/4"	MG/MGT1240	UL	1.6	$8.95	$8.45
31481-PA	B	13.2VAC	.830mA	5.5/2.1mm Coaxial	6	Black	2-3/4" X 2" X 1-5/8"	Selcom Ind. DV-1283-2	UL/CSA	.62	$4.95	----
17560-PA	C	18VAC	1.1A	2 Pos. Screw	-	Beige	2-3/8" x 2-1/4" x 2"	AULT	UL	.8	$3.95	----
31005-PA	A	24VAC	1.6A	2 Pos. Screw-LED Ind.	-	White	4" x 2-5/8" x 2-1/4"	MG Electronics	UL	1.6	$9.25	$8.45

CHASSIS MOUNT TRANSFORMERS

A

SELECTING TRANSFORMERS

Volts & Current listed are nominal RMS. Open circuit and loaded values are different.
Type of rectifier/filter circuit will effect secondary & output current and they can be very different.
Full wave center tap choke input filter: Transformer secondary amps are .7 X required output amps.
Full wave center tap cap input filter: Transformer secondary amps are 1.2 X required output amps.
For Full wave bridge choke input filter: Transformer secondary amps are = to required output amps
For Full wave bridge cap input filter: Transformer secondary amps are 1.8 X required output amps.

B

STOCK #	STYLE	INPUT	OUTPUT VOLTS	AMPS	LEADS	DIMN. (L W H)	WT.	1EA
The following Transformers have a Center tapped secondary allowing use of Half wave, Full wave center tap or Full wave bridge rectifier circuits.								
7838-TR	A	110/220VAC	12VAC (6V-0V-6V)	1A	6"	2-3/4" x 1-1/2" x 1-5/8"	.6	$4.75
7839-TR	A	110/220VAC	12VAC (6V-0V-6V)	2A	6"	3-1/4" x 2" x 2"	1.3	$7.29
7840-TR	A	110/220VAC	12VAC (6V-0V-6V)	4A	6"	4" x 2" x 2-1/4"	1.7	$12.95
7841-TR	A	110/220VAC	18VAC (9V-0V-9V)	1A	6"	3" x 2" x 1-3/4"	.8	$5.95
7842-TR	A	110/220VAC	18VAC (9V-0V-9V)	1.5A	6"	3-1/4" x 2" x 1-7/8"	1.1	$5.95
7843-TR	A	110/220VAC	18VAC (9V-0V-9V)	2A	6"	3-1/4" x 2" x 1-7/8"	1.1	$6.95
7844-TR	A	110/220VAC	24VAC (12V-0V-12V)	2A	6"	3-1/2" x 2-1/4" x 2"	1.4	$8.95
7845-TR	A	110/220VAC	24VAC (12V-0V-12V)	4A	6"	3-7/8" x 2-1/2" x 2-1/4"	2.3	$14.95
7846-TR	B	110/220VAC	24VAC (12V-0V-12V)	10A	6"	3-3/4" x 3-5/8" x 3-3/8"	5.5	$29.95

.5KVA ADJUSTABLE AUTOTRANSFORMER WITH LCD DISPLAY

Input: 110 VAC 50/60Hz
Output: 0-130V@ 500VA (4A)
Specifications/Features: Enclosed, non-isolated, Adjustable transformer Features: lighted Switch, 5A fuse & single 3 blade outlet. 6ft. Cord
Backlighted LCD Output Meter
H: 6" **W:** 5" **D:** 6-1/2" **WT:** 10

STOCK #	DESC.	1EA
31011-TR	.5KVA Adj. Transformer Digital	$49.95

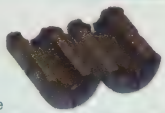
.5KVA ADJUSTABLE AUTOTRANSFORMER

360° VIEW @MPJA.COM

Input: 110 VAC 50/60Hz
Output: 0-130V@ 500VA (4A)
Specifications/Features: Enclosed, non-isolated, Adjustable transformer Features: Analog Output Volt Meter, lighted Switch, fuse & single 3 blade outlet.
H: 6" **W:** 4-3/4" **D:** 6-1/2" **WT:** 10

STOCK #	DESC.	1EA	6+EA200
15162-TR	.5KVA Adj. Transformer	$49.95	$43.80

SNAP-ON NOISE FILTERS



Fair-Rite P/N 0443167281ferrite snap-on filters. Plastic case with type 44 split core material. Clamps around cable up to .4in Dia. and blocks noise. Frequencies from 30MHz to500MHz. Permeability=500, impedance: 125 @ 25MHz /210 @ 100MHz
L: 1.55" **W:** .94" **H:** .94" **WT:** .08

STOCK #	DESC.	1EA	25+EA
17842-FL	.4" Clam Noise Filter	$2.49	$1.95

2KVA ADJUSTABLE AUTOTRANSFORMER WITH LCD DISPLAY

Input: 110 VAC 50/60Hz
Output: 0-130V@ 2KVA (15A)
Specifications/Features: Specifications/Features: Enclosed, non-isolated, Adjustable transformer Features: lighted Switch, 20A fuse & a duplex 3 blade outlet, 6ft. Cord.
Backlighted LCD Output Meter
H: 7-1/2" **W:** 8-3/4" **D:** 6-7/8" **WT:** 22

STOCK #	DESC.	1EA
31016-TR	2KVA Adj. Transformer Digital	$99.95

2KVA ADJUSTABLE AUTOTRANSFORMER

Input: 110 VAC 50/60Hz
Output: 0-130V@ 2KVA (15A)
Specifications/Features: Enclosed, non-isolated, Adjustable transformer Features: Analog Output Volt Meter, lighted Switch, 20A fuse & a duplex 3 blade outlet.
H: 7-1/2" **W:** 8-3/4" **D:** 6-7/8" **WT:** 22

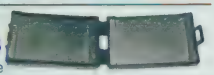
STOCK #	DESC.	1EA	6+EA
15163-TR	2KVA Adj. Transformer	$104.95	$93.59

RFI INLET FILTER

DELTA 10ME3, PC board/Panel mount, power inlet/RFI Filter. Rated: 10A @ 115/250VAC. Standard male 3 blade IEC cord connector. Right angle solder output terminals, UL/CSA /VDEIisted.
W: 2" **H:** 1-1/32" Body **D:** 1-5/8" **WT:** .1

STOCK #	DESC.	1EA
18456-FL	6A Delta RFI Module	$3.95

FLAT CABLE NOISE FILTERS



Fair-Rite Snap-On, ferrite filters. Clamps on ribbon cable up to 1" wide & up to .05"thick (20 conductor). Type 43 material blocks noise frequencies from 1MHz to100MHz. Permeability=1000, impedance: 77 @ 25MHz 225 @ 100MHz. Peel-n-stick mounting tape on back
L: .9" **W:** 1.5" **H:** .375" **WT:** .05

STOCK #	DESC.	1EA	10+EA
15456-FL	20 Cond. Noise Filter	$2.25	$1.89

10UH POWER CHOKES

DALE IH-310 high current filter choke. 1in Radial tinned leads for P.C. mount.
Rated: +-10% Ind. tol. . -55-+75° "C" operating temp. at full load.
IH-3-10uH/.018 ohm DC res./9A cont
L: 1" **Dia:** .63" **WT:** .03

STOCK #	DESC.	1EA
18059-CH	IH-3 10uH Choke	$0.35

SIGN-UP FOR OUR EMAIL SPECIALS ON MPJA.COM

SOLDERING STATION

General purpose solder station for the hobbyist. Adjustable from 5 to 50 Watt (800° F max) heat output for repairing PC boards to soldering transformer terminals. Station provides on-off switch, knob to control wattage, built-in stand, tip cleaning sponge & 1/32" point tip. 115 VAC line.

Base **L:** 5-5/8" X **W:** 4-9/16" X **T:** 3-5/8" **WT:** 1.8

STOCK #	DESC.	1EA	10+EA
15860-TL	Solder Station	$14.95	$13.95
15861-TL	Replacement handle	$4.95	$4.49

REPLACEMENT TIPS

Tips for **15860-TL ONLY** soldering station. Different styles for various uses. **WT:** .05

STOCK #	DESC.	1EA	10+EA
15862-TL	1/32" Point Tip	$1.95	$1.75
15863-TL	1/16" Point Tip	$1.95	$1.75
15864-TL	1/8" Flat Tip	$1.95	$1.75
15865-TL	1/8" Chisel Tip	$1.95	$1.75

HOT AIR REWORK STATION

360° VIEW @MPJA.COM

Hot air repair/rework station for SMT devices. Features: a fast heating ceramic heater, internal air supply, stable temperature, comfort grip handle, interchangeable hot air nozzles for PLCC/SOP/ etc. devices. Adjustable temperature & air flow. Temperature range: 150 deg.-500deg. "C".
Station Includes 4 nozzles:
16123-TL QFP 10 X 10 (mm),
16124-TL QFP 14 X 14 (mm),
16122-TL Single 2.5mm Dia.,
16128-TL Single 4mm Dia.
Repair Parts & Other Nozzles Available

WT: 9

STOCK #	DESC.	1EA
16121-TL	SMD Rework Station	$99.95

REPLACEMENT REWORK STATION PARTS

See soldertoolsdepot.com for pictures of replacement parts for 16121-TL.

STOCK #	DESC.	1EA
17215-TL	Replacement Heater	$4.95
17216-TL	Replacement Wide Pickup Wire	$1.49
17217-TL	Replacement Narrow Pickup	$1.49
17218-TL	Replacement Pickup Handle	$1.49

HOT AIR STATION NOZZLES

VISIT **mpja.com for listing and pictures of QFP/SOP nozzles** Tips for **16121-TL**. Different styles for various uses.

WT: .2

STOCK #	DESC.	1EA
16122-TL	2.5mm Dia. Nozzle	$4.95
16123-TL	10mm sq. QFP Nozzle	$6.95
16124-TL	15mm sq. QFP Nozzle	$6.95
16125-TL	19 mm sq. QFP Nozzle	$6.95
16126-TL	15mm X 21mm QFP Nozzle	$6.95
16127-TL	29mm sq. QFP Nozzle	$7.95
16128-TL	4.4mm Dia. Nozzle	$4.95
16129-TL	4.8 X 10mm SOP Nozzle	$6.95
16130-TL	5.7 X 15mm SOP Nozzle	$6.95
16131-TL	7.2 X 16mm SOP Nozzle	$6.95
16132-TL	7.2 X 19mm SOP Nozzle	$6.95

TEMPERATURE CONTROLLED SOLDER STATION

360° VIEW @MPJA.COM

ZD Electronic Tools ZD-929C Temperature controlled soldering station with LED display. Heat sensor located near the tip for fast response and +-10° "F" control. Rated at 48Watts, 24Vac handle. Temperature range: 320° "F" to 800° "F". Isolated tip, fused line. 117 VAC.
Extra tips are available for general replacement or special uses.
Base **L:** 6-3/4" X **W:** 4-3/4" X **T:** 3-9/16" **WT:** 4.8

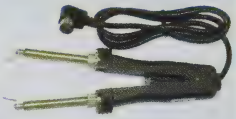
STOCK #	DESC.	1EA	5+EA
15845-TL	LED Solder Station	$46.95	$39.95
15846-TL	Replacement Handle	$6.95	$6.49

REPLACEMENT TIPS

Tips for **15845-TL ONLY** temperature controlled soldering station. Different styles for various uses. **WT:** .05

STOCK #	DESC.	1EA	10+EA
15851-TL	.12" Conical Tip/std. Shank	$1.95	$1.75
15852-TL	.08" Chisel Tip/std. Shank	$1.95	$1.75
15853-TL	.02" Round Tip/med. Shank	$1.95	$1.75
15854-TL	.06" Blunt Tip/thin Shank	$1.95	$1.75

SMD HOT TWEEZER ADAPTER



48W, Hot tweezer adapter replaces the soldering iron handle/heater assembly on our 15845-TL station. Removes surface mounted components up to 2.5mm with tip supplied.Other size tips are available.

WT: .5

STOCK #	DESC.	1EA	5+EA
15847-TL	Hot Tweezers Adapter	$12.95	$11.49

SMD TWEEZER TIP SET

Set of 7 different size tips for SMD tweezer handle 15847-TL. One pair of 2.5mm, 3.5mm, 5mm, 10mm, 15mm, 20mm and 30mm wide tips.

WT: .1

STOCK #	DESC.	1EA	5+EA
15848-TL	Hot Tweezer Tip Set	$5.95	$5.49

MINI SOLDER STATION

8W mini temperature controlled soldering station with un-grounded tip and comfort grip handle. Easy off connector for easy replacement of handle/heater. Adjustable Temperature range: 100 deg. "C" to 450 deg. "C" (212-842 "F"). Fused line. 117 VAC.

L: 4" **W:** 3" O/A **H:** 1-7/84" **WT:** 1.5

STOCK #	DESC.	1EA	10+EA
16924-TL	8W Mini Station	$12.95	$11.95

30W SOLDERING IRON

Light weight, 30 watt pencil iron with pointed Tip. Inchudes simple stand & Spare Tip. 4ft, 3 wire line cord. Tip is grounded. Overall length of iron is 9". Ideal for general shop use. CE listed

L: 8-1/4" **WT:** .45

STOCK #	DESC.	1EA
17518-TL	30W Solder Iron/Stand	$5.95

REPAIR STATION

Technician work station with Soldering station, Digital Meter & Adjustable Power Supply. CE listed
Includes: Meter Probes, Power supply clip leads, Soldering Iron stand.
Features:
Power Supply: 1.2-12VDC adjustable @ 1Amp
Digital Multimeter: Backlit 3-1/2" digit LCD display. 9V battery power, Accuracy:2% worst case (10A range)
DC V & CURRENT
Volts: .2,2,20,200,500V
Current:200ua,2,20,200mA,(10A max 10 seconds)
AC VOLTS
Volts: 200,500V
RESISTANCE
Ohms:200-2K-20K-200K-2M-200M
Test V: <2.8 VDC
MISCELLANEOUS
Diode Test, 1.5, 9 & 12V Battery test
Accuracy:2% worst case (10A range)
Solder station: 40W Temperature controlled soldering station with; grounded tip, ceramic heater and comfort grip handle. Processor controlled closed loop temperature control. LCD display shows Set & Actual temperature in F or C. Easy off connector for easy replacement of handle/heater. Push the knob once to turn the solder station "ON", push the knob again to switch between degrees "C" and "F". Push and hold for 3 seconds to turn the unit "OFF". Adjustable Temperature range: 160 deg. "C" to 400 deg. "C" (320-750 "F").
POWER: 100-240VAC / Fused @ 1A

WT: 7

STOCK #	DESC.	1EA
8901-TL	Tech. Test Station	$125.95

60W SOLDERING IRON

Light weight, 60 watt pencil iron with pointed Tip. Includes simple stand. 4ft, 2 wire line cord. Ideal for general shop use. Includes simple stand.

L: 9-1/2" **WT:** .4

STOCK #	DESC.	1EA
18339-TL	60W Solder Iron/Stand	$6.95

DESOLDERING IRON

Light weight, 40 watt desoldering iron. Built in solder sucker, 4ft, 3 wire line cord. Overall length of iron is 10-1/2". Ideal for general shop use. 115VAC/40W

L: 10-1/2" **WT:** .6

STOCK #	DESC.	1EA	10+EA
16922-TL	Desoldering Iron	$6.95	$5.95
16923-TL	Replacement Tip	$1.95	$1.75

LIGHTED SOLDERING IRON

Light weight, 30 watt pencil iron with a pointed tip and a White LED that illuminates the tip. 4ft, 3 wire line cord. Tip is grounded. Overall length of iron is 9". Ideal for general shop use. CE listed.

L: 9 **WT:** .4

STOCK #	DESC.	1EA
17516-TL	Lighted Solder Iron	$5.95
17531-TL	Replacement TIP	$1.75

THOUSANDS MORE ITEMS ON MPJA.COM

HOBBYIST SOLDER STATION

ZD Electronic Tools ZD-932
Soldering station with holder & cleaning sponge. TRIAC controlled output up to 48Watts, Temperature range: 250 °C" to 480 °C". 117 VAC. non-fused line.
NON-Isolated tip,
Extra tips are available for general replacement or special uses.
W: 5-1/2" **H:** 4-3/4" (Base) **D:** 6-1/2" **WT:** 2

STOCK #	DESC.	1EA	10+EA
19154-TL	Manual Solder Station	$15.95	$14.95
REPLACEMENT TIPS			
15851-TL	.12" Conical Tip/std. Shank	$1.95	$1.75
15852-TL	.08" Chisel Tip/std. Shank	$1.95	$1.75
15853-TL	.03" Round Tip/med. Shank	$1.95	$1.75
15854-TL	.06" Blunt Tip/thin Shank	$1.95	$1.75

ADJUSTABLE SOLDERING IRON

Clear handle, Light weight, adjustable 50 watt pencil iron with a pointed tip. Temp. Range: 200-450 °C". Red LED indicates heater operation. 4ft, 3 wire line cord. Tip is grounded. Overall length of iron is 9". Ideal for general shop use. CE listed.
L: 9-5/8" **WT:** .5

STOCK #	DESC.	1EA
17517-TL	Adj. 50W Solder Iron	$12.95
17530-TL	Replacement TIP	$1.95

SOLDERING IRON STAND

Metal Soldering iron stand with spun metal cleaning pad. No wet sponge or drastic cooling of tip. Leaves a small amount of solder for anti-oxidation & wetting.
L: 6-3/4" **W:** 2-3/8" **H:** 2" **WT:** .1

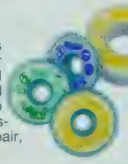
STOCK #	DESC.	1EA
31240-TL	Solder Iron Stand/Pad	$4.95
31241-TL	Replacement Metal Pad	$2.95

SOLDERING IRON STAND

Metal stand for pencil irons. Spring type, 5" X 3-1/4"base with wiping sponge. High temperature thermo-plastic collar to keep iron handle cool.
L: 5" **W:** 3-1/4" **WT:** .2

STOCK #	DESC.	1EA	5+EA
4455-TL	Solder Iron Stand	$4.50	$3.95

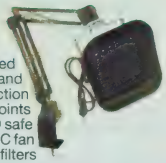
SOLDER BRAID



MG Chemicals "SuperWick" is made from oxygen free copper & pure RMA rosin. When placed on a solder connection and heated; Superwick will draw up the melted solder. 5ft on a plastic spool. Ideal for PC board repair, field service, etc.
L: 5ft/ 25ft. **WT:** .2/1

STOCK #	DESC.	1EA
30369-MG	#424 5ft X .05in. Superwick	$2.85
30370-MG	#425 5ft X .075in. Superwick	$2.95
30371-MG	#426 5ft X .10in. Superwick	$3.15
30372-MG	#442 25ft X .05in. Superwick	$10.95

ADJUSTABLE ARM SMOKE ABSORBER



Smoke absorber with activated carbon filter removes fumes and smoke from work area. 2 section cantilevered metal arms with 3 joints allows for multi-positions. ESD safe plastic with metal stand. 115VAC fan with 5ft. cord. Includes 2 spare filters (filters should be changed after 30 days of use), 2 fan exhaust deflectors. +- 85deg. Arm swing.
H: adj 0-16"from Benchtop **WT.:** 6

STOCK #	DESC.	1EA
17529-TL	Smoke Absorber	$39.95
15167-TL	Replacement Carbon Filters	$6.50

BENCHTOP SMOKE ABSORBER

360° VIEW @MPJA.COM

Benchtop smoke absorber with activated carbon filter removes fumes and smoke from work area. ESD safe plastic with metal stand. 115VAC fan with 5ft. cord. Includes 2 filters. (filters should be changed after 30 days of use).
H: 10" **W:** 7-3/4" **D:** 4-1/4" **WT.:** 3.1

STOCK #	DESC.	1EA
15166-TL	Smoke Absorber	$27.99
15167-TL	Replacement Carbon Filters	$6.50

ANTISTATIC SOLDER SUCKER

Antistatic solder removal tool with plastic body and teflon tip. Spring loaded tool with push button release, uses suction to remove solder from circuit board components.
L: 13-1/2" **D:** 1-1/4" **WT:** .25

STOCK #	DESC.	1EA	50+EA
17220-TL	Solder Sucker	$5.95	$4.95
17221-TL	Replacement Tip	$1.95	$1.49

ANTISTATIC TIP SOLDER SUCKER

Solder removal tool with Plastic body and Antistatic tip. Spring loaded tool with push button release.
L: 11-1/4" **D:** 15/16" **WT:** .2

STOCK #	DESC.	1EA	5+EA
15859-TL	Solder Sucker	$6.95	$6.49
15858-TL	Replacement Tip	$2.35	$1.95

MINI SOLDER SUCKER

Plastic tip and aluminum body. Spring loaded with push button release, with replaceable tip.
L: 7-7/8" **D:** 7/8" **WT:** .2

STOCK #	DESC.	1EA	5+EA
0041-TL	Mini Solder Sucker	$3.95	$2.95
9178-TL	Mini Replacement Tip	$0.69	$0.59

SOLDER BRAID

When placed on a solder connection and heated; this rosin coated copper braid will draw up the melted solder. 1.5m (4.9ft) on a plastic spool. Ideal for PC board repair, field service, etc.
L: 1.5m **WT:** .2

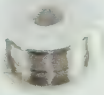
STOCK #	DESC.	1EA	5+EA
2648-TL	2.5mm Wide Solder Wick	$0.65	$0.59
19165-TL	3mm WideSolder Wick	$0.75	$0.69

LOW LEAD SOLDER

93Sn/7Pb alloy
Solidus: 183 deg. "C"
Liquidus: 220 deg. "C"
1mm/.039" Dia. ~18AWG
Mildly Activated core
For general applications requiring slightly higher temperature range than standard 60/40 alloy
190gm (Approx 110ft.)
WT: .5

STOCK #	DESC.	1EA
17718-TL	Low Lead Wire Solder	$12.95

60/40 SOLDER



1/2 lb. spool of .08mm (.032") dia., Rosin Core Tin/Lead solder. Half pound spool for bench top or tool box. For all electronic uses.
WT: .52

STOCK #	DESC.	1EA
19266-TL	60/40 .08 Wire Solder	$12.95

NO LEAD SOLDER

96.5Sn/3Ag/0.5Cu alloy
Liquidus: 217-220 deg. "C"
1mm/.039" Dia. ~18AWG
Mildly Activated core
10gm tube for general applications requiring a NO-LEAD Solder
10gm (Approx 6ft.)
WT: .06

STOCK #	DESC.	1EA
30090-TL	Lead Free Solder	$3.49

TIN/LEAD SOLDERS

.22lb. (100g) spool of 1mm (.040") dia., Rosin Core Tin/Lead solder. 100gr spool for bench top or tool box. For all electronic uses.
WT: .24

STOCK #	DESC.	1EA
30089-TL	60/40 .1" Wire Solder	$8.95
30088-TL	63/37 .1" Wire Solder	$7.95

SAFETY GLASSES

Medium duty, ANSI (Z87.1) approved plastic safety glasses. Adjustable temple length, Do not fit over all corrective lens glasses. Holes for neck cord (not included).
WT: .09

STOCK #	DESC.	1+EA
18340-TL	ANSI Safety Glasses	$1.95

PC BOARD FLUSH CUTTER

Features: Spring Loaded, cutters with cushion grip handles
Use: Trimming PC Board Leads.
L: 5" **WT:** .17

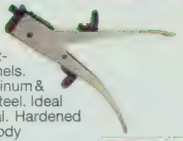
STOCK #	DESC.	1EA
16761-TL	5in. Flush Cutter	$2.75

FLUSH CUTTERS

Spring loaded Flush Cutters Feature: Hardened to HRC58, cushion grip handles, cut copper wire up to 1mm
Use: Trimming PC Board Leads.
L: 5" **WT:** .18

STOCK #	DESC.	1EA
18334-TL	5in. Flush Cutter	$2.95

NIBBLING TOOL



HT-204Nibbling tool for cutting out PC boards and panels. Cut up to 1/16" Copper, Aluminum & plastic. Up to 18AWG Mild steel. Ideal for .062in PC board material. Hardened tool steel punch with steel body

L: 7-3/8" **WT:** .5

STOCK #	DESC.	1EA
31197-TL	HT-204 Nibbling Tool	$9.95

6-1/2" HARDENED CUTTERS

6-1/2 in, forged high carbon Steel dikes with Cushioned grips. Hardened to 55-60 HRC For hard copper, Brass, Light spring & Stainless steel,

L: 6-1/2" **WT:** .34

STOCK #	DESC.	1EA
18912-TL	6" Hardened Cutter	$2.95

GENERAL PURPOSE CRIMPER

General purpose & automotive stripper/crimper with Cushioned Grips.
Strips solid 18-8AWG & 22-10AWG stranded wire, Cuts 4-40, 6,8,10-32 & 10-24 bolts, Cut & strip Wire, Crimps 10-22 AWG Ins. & Non Ins. and 7-8mm Auto Terminals

L: 8-1/4" **WT:** .5

STOCK #	DESC.	1EA
19110-TL	General Purpose Tool	$4.95

WIRE STAPLE GUN

SHUREBONDER Model 5540 Cable & Wire tacker for Flat wire up to 5/32" wide or round cable up to 1/4" Dia. Requires #15 staples for flat or #14 for round cable available below.

WT: .82

STOCK #	DESC.	1EA
19126-TL	Surebonder Wire Tacker	$8.95

WIRE STAPLES

SHUREBONDER Cable & Wire staples designed for Surebonder 5540 wire tacker only.
#14 for round cable to .25in. Dia. BOX of 630

STOCK #	DESC.	1EA
19134-HD	#14 Surebonder Round Staples	$2.95

6" STAINLESS DIGITAL CALIPER

Digital caliper features selctable Inch or mm range. Hardened stainless steel with plastic cased electronics. For ID or OD measurments. "Zero" button for resetting or setting offsets. 6in/ 150mm Max. .0005"/.01mm accuracy/min. reading. Requires a 357A Button cell (Supplied). Stores in foam lined plastic case.

L: 9-1/4" **WT:** .7

STOCK #	DESC.	1EA
17471-TL	6" S/S Digital Calipers	$12.95

SIGN-UP FOR OUR EMAIL SPECIALS ON MPJA.COM

STRIPPER CUTTER

Dual action stripper, place wire, pull handle & release. Adjustable strip length. For 20-24AWG flat cable or 10-24AWG round wire.

L: 7" **WT:** .5

STOCK #	DESC.	1EA
19109-TL	Dual Action Stripper	$4.95

CABLE SLITTER STRIPPER

Swiveling blade for slitting or stripping Coax or power Cable. Spiral, longitudinal or circular slitting. Adjustable depth of cut. Spring loaded brace. Cable Range: As listed
L: 5-1/4" Small 6-3/4" Large

STOCK #	DESC.	WT.	1EA
19116-TL	37-47mm Cable Slitter	.3	$14.95
19117-TL	8-28mm Cable Slitter	.2	$12.95

WIRE STRIPPERS

Precision Strippers feature: Spring Loaded , Cushioned Grips, Ground Cutting Jaw. Strips 10-22AWG/2.6-0.6mm wire.

L: 61/2" **WT:** .4

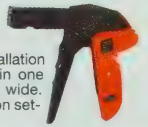
STOCK #	DESC.	1EA
19111-TL	Precision Stripper	$4.95

"F" CONNECTOR COMPRESSION TOOL

Hand tool for compression type waterproof "F" connectors. Features: 13mm compression distance, Cushioned Grips, palm squeeze Action, single cavity, for RG-59 & RG-6 coaxial cable
L: 5" **WT:** .62

STOCK #	DESC.	1EA
19225-TL	Squeeze Compression Tool	$12.95

CABLE TIE TOOL



ELECTROFORCE #89605,Tie installation tool tightens & cuts nylon ties in one operation. For ties up to .19in. wide. Adjustment knob selects 8 tension settings.

L: 6-3/4" **H:** 5-3/4" **T:** 1" **WT:** .7

STOCK #	DESC.	1EA
18353-TL	Tie Install Tool	$4.95

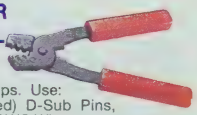
HEX CRIMP TOOL

Heavy Duty HEX Crimp Tool for RG59, RG6 & RG-62 "F" connectors.
Features: Cushioned Grips, Dual Cavity: .255" & .322"

L: 9" **WT:** 1.5

STOCK #	DESC.	1EA
19209-TL	RG-6,62 HEX Crimp Tool	$9.95

DB CONNECTOR PIN CRIMP TOOL



Multi Purpose Crimp Tool
Features: Cushioned Grips. Use: Crimping Open (stamped) D-Sub Pins, Ternimal Lugs. For 14-26 AWG Wire,
NOTE: Will not crimp High Density DB Pins.

WT: .6

STOCK #	DESC.	1EA	10EA
11763-TL	Multi Crimp Tool	$9.95	$7.95

DUAL RANGE HEAT GUN

Heat Gun with two heat ranges: 800 Watt or 1500 Watt, With control knob to vary the temperature. Low range 50-200° C, high range 200-500° C. 5ft. 3 wire power cord. 115VAC power. Includes concentrator nozzle attachment. Ideal for heatshrink tubing, paint stripping, plastic fabrication.

L: 10-1/4" **W:** 2-7/8" **H:** 8-1/4" **WT:** 2

STOCK #	DESC.	1EA	10+EA
15857-TL	Heat Gun	$18.95	$17.95

HEX BIT DRIVER

FOR A LIMITED TIME RECEIVE A FREE 4 PIECE BIT SET!
While supplies last.

Cordless driver for 1/4" (6.35mm) HEX shaft Bits. 130RPM, Uses 4 "AA" cells (not supplied)
L: 8-1/4" **DIA:** 1-5/8" **WT:** .55

STOCK #	DESC.	1EA
18706-TL	HEX Bit Driver	$8.95

CORDLESS ROTARY TOOL

9.6V Cordless high speed rotary tool. Packaged for sanding pet nails. Accepts all 1/8"bits & mandrils normally used with hobby rotary tools. 8000-20000RPM. Supplied with 3 sanding tubes, tube mandril, chuck wrench and charging stand.

L: 9-1/4" **DIA:** 2-1/8" **WT:** 1.7

STOCK #	DESC.	1EA
18931-TL	Cordless Rotary Tool	$6.95

SUCTION BASE TABLE VISE

Light duty table vise with aluminum body, steel screw, rails and jaw inserts. 2-3/4"wide jaw opens 2-3/4". removable rubber jaw covers. Rotates 360deg. Tilts 45deg. Non marring suction base.

L: 6" **W:** 6" **H:** 6" **WT:** 3

STOCK #	DESC.	1EA
18578-TL	Vacuum Base Vise	$19.95

ADJUSTABLE ANGLE TABLE VISE

Light/medium duty aluminum table vise has rubber jaw grips & allow +-45° tilt from vertical & 360° swivel. 80mm jaw with swivel ball piviot. Clamps to table/bench up to 2" thick. 2" max jaw opening.

H: 10" O/A **W:** 5-7/8" **WT:** 4.2

STOCK #	DESC.	1EA	5+EA
11240-TL	Adj. Table Vise	$14.95	$12.95

60 cc SYRINGE

Medical Plastic syringe designed to "Irrigate" wounds, provide food for feeding tubes, nurse animals etc. Holds around 2oz (60cc). Transparent plastic with both oz. & cc graduations. Thumb ring and finger tabs for extra leverage; includes protective end cap.

L: 8" **WT:** .1

STOCK #	DESC.	1EA	10+EA
31431-MI	60cc Syringe	$1.49	$1.29

STAINLESS TWEEZERS

Stainless steel, sharp point, industrial tweezers. Available either standard straight or curved for lower fatigue. Ideal for picking up small components or parts.

WT: .03

STOCK #	FIG	DESC.	1EA
19543-TL	A	5" Curved Tweezers	$1.49
19544-TL	B	4-3/4" Straight Tweezers	$1.49
19545-TL	C	4-3/8" Cutback Tweezers	$1.49

LIGHTED MIRROR

Telescoping, rectangular inspection mirror with 2 super brite mini white LEDs. Mirror head is 2-1/2" X 1-5/8". 11" collapsed (max), 34" extended (max). Uses two Coin Cells (included).

L: 11-34" **W:** 2-1/4" **WT:** .28

STOCK #	DESC.	1EA
18916-TL	Telescoping Lighted Mirror	$9.95

UV FLASHLIGHT

Medium duty LED "Stubby" UV flashlight. 8 ULTRA-VIOLET LEDs in aluminum case for corrosion resistance. Fixed focus lens. Requires 3 "AAA" cells (not supplied). Alternate action push button switch on back end. Includes 4" strap. For currency examination, chemicial analysis, gem indentification etc.

L: 4" **WT:** .28

STOCK #	DESC.	1+EA
17346-TL	8 LED UV Flashlight	$12.95

LED FINGERLIGHT

4 pack of Unique, "finger" flashlights that straps to your finger, pen & tools with a hook-n-loop strap. White LED uses 3 replaceable AG10 coin cells (Included). Slide switch on top. Assorted body colors.

L: 1-5/8" **WT:** .1

STOCK #	DESC.	1EA
16711-TL	4 pack Finger Flashlights	$2.95

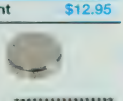
3W SUPERBRIGHT FLASHLIGHT

Heavy Duty multi-function Flashlight with a single CREEQ3 White super bright white LED Rated 100-120Lumens. Black, water resistant machined aluminum case. Fixed focus lens & reflector. Requires 2 "AA" cells (Not supplied). Triple action push button switch on back: Press ON, Press again OFF, Press again FLASH, Press again OFF. Includes belt pouch.

L: 8-3/8" **D:** 1-3/8" max **WT:** .5

STOCK #	DESC.	1+EA
31247-TL	3 Way 3W LED Flashlight	$12.95

RARE EARTH MAGNET

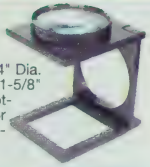


Nickel plated Neodymium magnet 10mm dia X 3mmthick. High strength.

Dia: 3/8" **T:** 1/8" **WT:** .004

STOCK #	DESC.	1EA
31170-MG	10mm Rare Earth Magnet	$0.99

GIANT FOLDING LENS



Folding magnifier with a quality 4" Dia. glass lens. 7" tall when open & 1-5/8" folded. 6-1/2" X 5-1/4" open bottom has inch/cm scales. Ideal for collectors, jewlers, electronic repairs.

L: 6-1/2" **W:** 5-1/4" **T:** 7" **WT:** 1

STOCK #	DESC.	1EA	5+EA
0079-LN	Giant Folding Lens	$6.95	$5.95

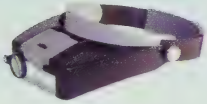
LARGE HELPING HANDS

Round cast iron base with 3-1/2" dia. glass magnifying lens, 2 alligator clips on a cross arm. Move & adjust every which way, leaving your hands free, A must for circuit board, model or jewelry work.

H: 8-1/2" **WT:** 1.4

STOCK #	DESC.	1+EA
16037-TL	Helping Hands & Lens	$5.95

LIGHTED 3 LEVEL MAGNIFIER

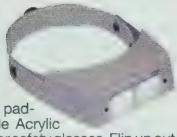


Flip up magnifier with adjustable headband & 3 levels of magnification. 1st. level is 1.5X, 2nd. lens folds down to increase magnification by 1.5X, 3rd. Lens rotates down over Right eye to increase magnification by 7.5X. Dual LEDs provide illumination. Do not interfere with eyeglasses, & flip up out of the way without removing from head. Requires 2 "AAA" cells (Not Included)

WT: .5

STOCK #	DESC.	1EA
18336-TL	3 Level Magnifier	$6.95

BINOCULAR MAGNIFIERS



5X magnifier with adjustable padded headband. Optical grade Acrylic lens. Do not interfere with eye or safety glasses. Flip up out of the way without removing from head. Made in USA.

WT: .41

STOCK #	DESC.	1EA
17653-TL	USA Binocular Magnifier	$15.95

100 PIECE BIT SET

Vast assortment of hard top locate drive bits.
Chrome/Vanadium steel bits 1" long
Set includes:

9pc Flat Blade	5 pc. Security HEX
8pc Phillips	8 Positive Drive
9 pc HEX mm	9pc Star mm
3pc XZN mm	4pc Square
3pc Torque set	4 pc Spanner
4 pc Tri-wing	9pc Security Star
3pc Clutch Drive	1pc Wingnut (5,6,8mm)
1/4" Sq to 1/4Hex	1/4" to 1/4Hex Socket
1/4" mag. bit holder	Plastic storage Case

SEE WEB FOR DETAILS

WT: 1.7

STOCK #	DESC.	1EA
18571-TL	100pc. Drive Bit Set	$9.95

THOUSANDS more items on www.mpja.com

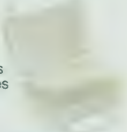
STORAGE/TRANSIT CASES

Molded Bright Yellow, ABS plastic equipment cases with handle, latches and hinges. Silicone rubber gasket for water resistance. Pressure relief screw. Foam insert in Top & Bottom.

Small Inside: **L:** 9.3" **W:** 6.2" **HT:** 3.5"
L: 10.23 **W:** 8" **H:** 4" **WT:** 1.85
Large Inside: **L:** 12" **W:** 7.4" **HT:** 4.4"
L: 13 **W:** 8.25" **H:** 4.7" **WT:** 3.1

STOCK #	DESC.	1EA
17813-BX	Small Yellow Transit Case	$17.95
18351-BX	Lerge Yellow Transit Case	$29.95

WHITE CASE



White plastic case originally made to house a small first aid kit. Handle has keyholes for wall hanging, 2 latches and tab for putting a tamper seal.

Inside: **L:** 7-3/4" **W:** 4-3/4" **HT:** 2-7/8"
L: 8-3/8 **W:** 5-1/2" **H:** 3" **WT:** .4

STOCK #	DESC.	1EA
18949-BX	White Plastic Case	$3.95

STAGING CLAMP

USED Vise type clamp used to hold signs, reflectors, lights and other rigging on pipe or pipe to tooling. Aluminum body with 2" EZ grip knob, steel bolt & platen. Max open clearance: 1-1/2". Max Pipe Dia: 1-1/4". Removable 3" X 2-3/4" 4 hole plate.

L: 4-1/4"O/A **W:** 3" **H:** 3" **WT:** .62

STOCK #	DESC.	1EA
19377-MI	Black Staging Clamp	$1.99

ALUMINUM DUCT TAPE

Standard adheasive backed aluminum duct tape. Each roll is 1-7/8in. Wide (48mm), 90ft. long & .002in. thick.

L: 90ft. **W:** 1-7/8" **WT:** .7

STOCK #	DESC.	1EA
19558-MI	Aluminum Duct Tape	$5.95

PVC ELECTRICAL TAPE

Adheasive backed PVC tape. Each roll is 3/4in. Wide, 66ft. long & .007in. thick. Rated for: <600V and <80°C use. UL/CSA Listed.

L: 66ft. **W:** 3/4" **WT:** .22

STOCK #	DESC.	1EA	10EA
19555-MI	Black Electrical Tape	$0.99	$0.89
19556-MI	Red Electrical Tape	$0.99	$0.89
19557-MI	Green Electrical Tape	$0.99	$0.89
30112-MI	Gray Electrical Tape	$0.99	$0.89
30114-MI	Brown Electrical Tape	$0.99	$0.89

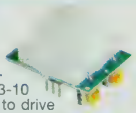
GIANT THERMOMETER

MFG: WIKA
P/N: TI.50 series
RANGE: -20 to +120° F (2deg. Subd.)
Material: 304 Stainless
Features: 5in. Dia. Bi-metalic tank thermometer with 12in. Stem & 1/2" NPT fitting. 1% accuracy.

L: 13" **WT:** 1.12

STOCK #	DESC.	1EA
18528-MI	Giant Thermometer	$19.95

MOTION DETECTOR/ LIGHT SENSOR



Latest Dual Element PIR Motion Detector for the human Body with adj. 3-10 lux light sensor. 3V digital output to drive Your external transistor & relay (not included)
5-20VDC Operation @ <1mA .
2 S-5min. Adj. delay
Adj. 3-7m range with <120 degree detection angle.
Selectable Retrigger/No Retrigger

L: 32mm **W:** 23mm **H:** 25mm **WT:** .08

STOCK #	DESC.	1EA
31227-SC	PIR Mini Module/Sensor	$3.95

MOTION DETECTOR MODULE

Ultra Mini Dual Element PIR Motion Detectors for the human Body. 3V digital output to drive Your external transistor & relay (not included)
4-15VDC Operation @ <1mA .
Fixed 2 Sec. Recycle & Hold times
3-5m range with 110 degree detection angle
Dia: 13.5mm **L:** 18mm **WT:** .08

STOCK #	DESC.	1EA
19517-SC	PIR Mini Module	$3.95

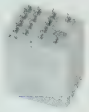
9VDC SPDT RELAY

MFG: FUJITSU
COIL: 6-14VDC/ 230ohm/9V nominal
CONTACT RATING: 15A/16VDC
ACTION: SPDT
PC Mount sealed automotive relay.

L: 7/8" **W:** 5/8" **H:** 15/16" **WT:** .04

STOCK #	DESC.	1EA
31403-RL	9VDC Fujitsu SPDT Relay	$0.49

240VAC 4PDT RELAY



MFG: MIDLAND-ROSS
P/N: 156-24U100
COIL: 240VAC/14.7Kohms
RATED: 3A@ 28VDC/120VAC Resistive; 1/10hp@120/240VAC
ACTION: 4PDT
General purpose relay with PC terminals UL/CSA listed.

H: 1-1/4"(Body) **W:** 1-1/8" **T:** 7/8" **WT:** .06

STOCK #	DESC.	1EA
18954-RL	240VAC Midland Relay	$5.95

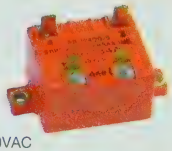
12VDC SPDT RELAY

MFG: SANYOU
P/N: SRU-S-112L
COIL: 12VDC
OUTPUT RATING: 12A@ 125VACRes. 10A @ 240VAC
ACTION: SPDT
General purpose relay with PC terminals UL/usa/canada listed.

L: 3/4" **W:** 5/8" **H:** 3/4" **WT:** .02

STOCK #	DESC.	1EA
30001-RL	10A 12V SPDT Relay	$0.99

12VDC SPST-NO RELAY

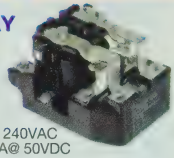


MFG: GORDOS
P/N: GGB-12400-5
CONTROL: 15VDC
OUTPUT RATING: 12A@ 250VAC
ACTION: SPST-NO
USED,Opto-Isolated, "0 voltage turn-on. 250" Output/ .187" Input Quick connect Terminals.

L: 2-5/8" **W:** 1-1/2" **H:** 1-1/2"O/A **WT:** .08

STOCK #	DESC.	1EA
19231-RL	12A Gordos SSR	$4.95

24VDC DPDT RELAY



MFG: TYCO
P/N: PRD-11DYO-24
COIL: 24VDC/280 ohms
CONTACT RATING: 25A FL@ 240VAC 2hp@250VAC 7A@ 50VDC
ACTION: DPDT
General purpose contactor with screw terminals for all wiring contacts. UL/CSA listed

L: 3-3/8" **W:** 2-1/2" **H:** 2-1/8" **WT:** .6

STOCK #	DESC.	1EA
31236-RL	24VDC Tyco DPDT Contactor	$7.95

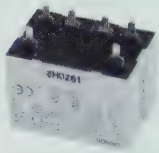
12VDC SPDT RELAY

MFG: TYCO
P/N: VF4-13
COIL: 12VDC/90 ohms
CONTACTS: SPDT
CONTACT RATING: N.O.: 40A/ **N.C.:** 30A@14VDC
General purpose, Automotive relay with 5 terminals for PCB Mounting.

SQ: 1" **H:** 1 Body **WT:** .06

STOCK #	DESC.	1EA
31840-RL	12VDC SPDT Relay	$0.99

110VAC DPST-NO RELAY

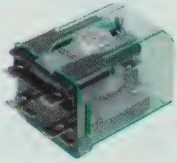


MFG: OMRON
P/N: G7L-2A-P-CB
COIL: 100-110VAC
CONTACTS: DPST-NO
RATED: 20A@277VAC Restive & Inductive, 1.3KW (Tungsten)
P.C. Board mount, UL/CSA/TUV/CE Listed

L: 2-1/16" **W:** 1-3/8" **H:** 1-1/2" (Body) **WT:** .6

STOCK #	DESC.	1EA
18900-RL	20A Omron110VAC Relay	$4.95

24VDC SPST-NO RELAY



MFG: MIDTEX
P/N: 188-24C200
COIL: 24VDC/460 ohms
CONTACT RATING: 30A,1HP@120VAC/277, 30A,1.5hp@240VAC
ACTION: SPST-NO Double Make
General purpose relay with .250" Quick connect terminals. UL/CSA Listed

L: 1-1/2" **W:** 1-3/8" **H:** 2" **WT:** .16

STOCK #	DESC.	1EA
31099-RL	24VDC Midtex Relay	$4.95

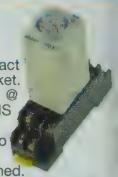
24VDC DPDT RELAY

MFG: MAGNECRAFT
P/N: 782XBXCT-24D
Coil: 24VDC/650
CONTACTS: DPDT
Rated: 15A@120VAC, 12A@277VAC Res 1/2hp@120VAC,12A @ 28VDC
P.C. Board mount, ULusa/canada/TUV/CE listed.

L: 1-1/16" **W:** 13/16" **H:** 1-3/8" **WT:** .08

STOCK #	DESC.	1EA
19242-RL	24V Magnecraft Relay	$4.95

12VDC TIME DELAY RELAYS



Delay on Turn-on, Very small, compact DPDT adjustable Timer & DIN Rail socket. Rated: 12VDC Power, Contacts: 5A @ 250VAC Resistive. UL/CSA listed, RoHS Compliant.
PW LED lights when power is applied to the coil.
UP LED lights when pre-set time is reached.
Power must be removed from the coil to rest the timer.
Measurements are of the timer only excluding relay base.

L: 2-1/4" **W:** 1-1/16" **T:** 13/16" **WT:** .14

STOCK #	DESC.	1EA
31153-RL	12VDC 30Sec. Time Delay Relay	$9.95
30405-RL	12VDC 60Sec. Time Delay Relay	$9.95

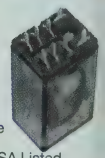
12VDC SPDT RELAY

MFG: TYCO
P/N: PCH-112D2H TV-3
COIL: 12VDC/ 360ohms
CONTACT RATING: 5A-NO: 3A-NC 30VDC/277VAC
ACTION: SPDT
PC Mount General purpose relay. ULcanada/us/CSA/ VDE listed

L: 3/4" **W:** 3/8" **H:** 9/16" **WT:** .01

STOCK #	DESC.	1EA
31237-RL	12VDC Tyco SPDT Relay	$0.99

24VDC DPDT RELAY



MFG: P&B
P/N: K10P1D55-24
COIL: 24VDC/640 ohms
CONTACT RATING: 10A@ 277VAC, 15A ,1/3hp @120VAC; 15@30VDC Resistive
ACTION: DPDT
PC Mount, General purpose relay. UL/CSA Listed

L: 1-1/8" **W:** 3/4" **H:** 1-1/2" **WT:** .07

STOCK #	DESC.	1EA
31098-RL	24VAC P & B Relay	$6.95

12VDC SPDT RELAY

MFG: MAGNECRAFT
P/N: W65RPCX-202
COIL: 12VDC/ 230ohms
CONTACT RATING: 10A/250VAC
ACTION: SPDT
PC Mount General purpose relay. UL/CSA listed

L: 1-3/16" **W:** 13/32" **H:** 1" **WT:** .04

STOCK #	DESC.	1EA
31401-RL	12VDC Magecraft SPDT Relay	$0.99

24VDC SPDT RELAY

MFG: ACC
P/N: 33A23S24
COIL: 24VDC/ 1800ohms
CONTACT RATING: 5A/120VAC
ACTION: SPDT
PC Mount General purpose relay. UL/CSA listed

L: 1" **W:** 11/16" **H:** 13/16" **WT:** .04

STOCK #	DESC.	1EA
31402-RL	24VDC ACC SPDT Relay	$0.49

AUTO RELAY SOCKET

Pre-wired, Automotive relay plug-on Socket with .250" Quick connect terminals and 11" pig tail leads. Fits many 12V 5 terminal Plug-ig auto relays. 18AWG White & Black Coil leads, 14AWG Red, Yellow, Blue contact leads.

WT: .08

STOCK #	DESC.	1EA
18546-RL	Auto Relay Socket	$1.95

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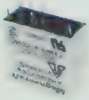
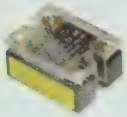
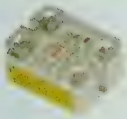
F 

G 

H 

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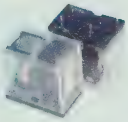
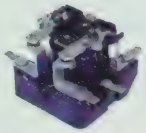
L 

M 

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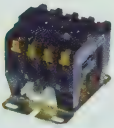
R 

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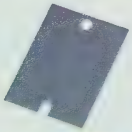
T 

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STOCK #	FIG.	COIL	CONTACTS	RATINGS	CONN.	DIM. LWH	MFG. PART #	LISTED	WT.	1EA	12+EA
31101-RL	B	4.5VDC	DPDT	2A@ 220VDC/250VACRes.	PC	13/16" x 3/8" x 1/2"	AXICOM/V23079-A1011-B301	UL/CSA	.005	$0.79	----
18482-RL	F	5VDC/47Ω	DPDT	5A @ 250VAC	PC	1-1/16" x 1/2" x 1"	MAGNECRAFT/W76EURCPCX-61	UL/CSA	.04	$5.95	----
18454-RL	C	12VDC	SPDT	3A@125VAC ind. /28V Res.	PC	1-3/16" x 3/4" x 1-1/4"	ESSEX/RBM/MS64-901	UL/CSA	.06	$1.25	$0.99
19024-RL	E	12VDC	SPDT	NO-40A@12VDC/NC-30A	QC1	1-1/8" x 1-1/4" x 1-5/8"	XPRESS/RL50	-	.08	$1.95	----
18483-RL	F	12VDC/275Ω	SPDT	10A @ 250VAC/30DC	PC	1-1/16" x1/2" x 1"	MAGNECRAFT/W76EURCPCX-16	UL/CSA	.04	$5.95	----
18610-RL	P	12VDC/100Ω	DPDT	20A@250V/3/4hp@120VAC	QC1	2-1/2" x 1-3/8"x 1-3/8"	AROMAT/HG2-DC12V	CSA	.3	$5.95	----
18502-RL	I	120VAC	4PDT	3A@125VACind./28V Res.	PC/SKT	1-1/8" x 7/8" x 1-1/4"	P&B/KH5569-1	CSA	.1	$4.95	----
9139-RL	J	24VDC	SPDT	10A@125VAC/6A@277VAC	PC	5/8" x 3/4" x 3/4"	AROMAT/PN JS1E-24V	UL	.027	$1.95	$1.75
4197-RL	K	48VDC/2.8KΩ	4PDT	1A@120VAC/30VDC Res. 1/10hp@120VAC	PC	1-1/4" x 13/16" x 1/2"	FUJITSU/PN FRL414D048/04CT	-	.03	$0.99	$0.79
12120-RL	L	24VDC	SPST-NO	15A@250VAC/24VDC Res.	PC	1-3/16" x 3/4" x 1-1/8"	OMRON/G4W-1112P-VD-TV8-HP	UL	.06	$1.95	$1.75
18230-RL	R	24VDC	4PST-NO	35A/600VAC Resistive 25FLA/150LRA/240VAC/pole	QC1	3-3/4" x 2-1/2"x 2-7/8"	P&B/PN P41C47DH0103Z03	UL/CSA	1	$5.95	----
18955-RL	M	24VDC	DPST-NO	30A/300VAC/28VDC Resistive 1-1/2hp/120-600VAC Motor	SCW	3-1/2" x 3" x 2-1/4"	MAGNECRAFT/199QX-5	UL	.6	$6.95	----
18255-RL	S	120VAC	3PDT	30A/75LRA @ 277V/Pole	PC	2" x 2-1/8" x 2-1/8"	DELTROL/375P	UL/us/c/CE	.3	$9.95	$8.95
16726-RL	U	110VAC	DPDT	1/2 hp/120VAC 12A res/240VAC	QC2	1-3/4" x 13/16" x 1-5	OMRON/LY2-UA-006244	UL	.2	$2.95	$2.75
19082RL	O	120VAC	3PDT	10A/120VAC Resistive	SKT/QC2	3" x 1-1/2" x 1-7/8"	MMIDTEX/614-43T3A4	-	.2	$ 14.95	----
				1/3 hp/120VAC 6-60Seconds Delay on Energize Time Delay Relay							

18193-RL	D	3-15VDC	SPST-NO	2A@ 110VDC Solid State Relay DC loads only	PC	1-1/4" x 3/8" x 3/4"	Gold Control/SDI1102D	------	.03	$4.95	$4.49
18194-RL	Q	3-15VDC	SPST-NO	3A @ 480VAC NEW Solid State Relay AC loads only	PC	1-11/16" x 3/8" x 3/4"	Gold Control/SAI4003D	------	.03	$5.95	$5.49
17154-RL	G	3-32VDC	SPST-NO	10A @ 480VAC NEW Solid State Relay AC loads only	SCW	2-7/8" x 1-1/2" x 1"	Gold Control/SAP4810D	------	.11	$7.95	$6.95
17155-RL	H	3-32VDC	SPST-NO	25A @ 480VAC NEW Solid State Relay AC loads only	SCW	2-7/8" x 1-1/2" x 1"	Gold Control/SAP4825D	UL	.11	$11.95	$9.95
17157-RL	H	3-32VDC	SPST-NO	40A @ 480VAC NEW Solid State Relay AC loads only	SCW	2-7/8" x 1-1/2" x 1"	Gold Control/SAP4840D	UL	.11	$15.95	$11.95
17288-RL	G	3.5-32VDC	SPST-NO	20A @ 12 to 480VDC NEW Solid State Relay DC loads only	SCW	2-1/4" x 1-3/4" x 1-1/4"	Gold Control/SDP4020D	CE	.2	$14.95	$12.95
17289-RL	G	3.5-32VDC	SPST-NO	40A @ 12 to 480VDC NEW Solid State Relay DC loads only	SCW	2-1/4" x 1-3/4" x 1-1/4"	Gold Control/SDP4040D	CE	.2	$17.95	$14.95
18500-IN	T	Silicone/Fiberglass Thermal pad for Solid State Relay.2-1/4" x 1-11/16" x .012" Temp: -50 to +180 C. Thermal Conductivity: .9 W/m-k Performance: 6°C/W Dielectric Breakdown: 4500VAC							.001	$0.49	----

PC=PC MOUNT / SDR=SOLDER / SCW=SCREW / SKT=SOCKET / QC1=.25" QUICK CONN / QC2=.187" QUICK CONN / DIP=DIP / UL=UL/CSA

A

SOLID STATE INTERFACE MODULE

STOCK #	FIG.	IN/OUT	FUNCTION	RATINGS	CONN.	DIM. LWH	MFG. PART #	LISTED	WT.	1EA	12+EA
14419-RL	A	35-60VAC/DC	SPST	6mA Max @ 60V in, 4KV isolation	PC	1-11/16" x 9/16" x 1"	GRAYHILL/PN 70-IDC5G	UL	.1	$3.95	$3.55
		SS Input Module	Interface between Ext. Loads and Microprocessor. 3-6V Output (5VDC Nominal) @ 10mA								

DB-25 DATA CABLES

Gold Plated Contacts, All Lines Wired Through.

STOCK #	DESCRIPTION	WT.	1EA	5+EA
2887-CB	6' DB-25 Male/Male	.5	$4.95	$4.49
7716-CB	6' DB-25 Male/Female	.5	$4.95	$4.49
11451-CB	10' DB-25 Male/Female	.7	$5.95	$5.45
11452-CB	15' DB-25 Male/Male	.9	$7.95	$7.45
11453-CB	15' DB-25 Male/Female	.9	$7.95	$7.45
11455-CB	25' DB-25 M/F Cable	1.4	$10.95	$10.45
11456-CB	50' DB-25 M/M Cable	2.8	$20.95	$19.95
11457-CB	50' DB-25 M/F Cable	2.8	$20.95	$19.95

DB-9 EXTENSION CABLES

DB-9 connectors. Gold Plated Pins

STOCK #	DESCRIPTION	WT.	1EA	5+EA
8641-CB	6' DB-9 Male/Male	.22	$2.95	$2.49
8642-CB	6' DB-9 Male/Female	.22	$2.95	$2.75
8643-CB	10' DB-9 Male/Male	.4	$4.95	$4.49
8644-CB	10' DB-9 Male/Female	.4	$3.49	$2.95

MONITOR CABLES

Hi density DB-15 connectors. Gold Plated Pins

STOCK #	DESCRIPTION	WT.	1EA	5+EA
8647-CB	6' Monitor Cbl. M/F	.2	$3.95	$3.49
8649-CB	10' Monitor Cbl. M/F	.2	$4.95	$4.49
18513-CB	25' Monitor Cbl.M/M	.2	$19.95	$16.95

DB-15HD M/M VGA CABLE

Hi-Density DB-15 connectors. Gold plated pins. Black jacket, Dark Blue molded connectors Ferrite filters on both ends. Pins 4, 6-8 & 11 tied to shell.

L: 6ft. **WT:** .4

STOCK #	DESC.	1EA
31238-CB	6ft. DB-15 M/M VGA Cable	$2.95

USB CABLES

USB inter-connect cables

STOCK #	DESCRIPTION	WT.	1EA	5+EA
12389-CB	6ft. USB A to A M/F	.15	$2.95	$2.59
11161-CB	6 ft. USB A to B M/M	.16	$2.95	$2.59
12390-CB	10ft. USB A to B M/M	.22	$3.95	$3.59

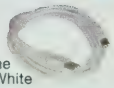
2 FT USB CABLE

USB 1.1 extension cable with a TYPE A male on one end and a Type A Female on the other. Charcoal jacket with molded strain reliefs.

L: 2ft. **WT:** .08

STOCK #	DESC.	1+EA
18481-CB	2ft.USB Cable	$1.29

5 FT USB CABLE

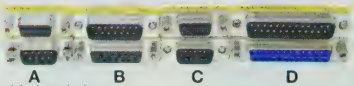


3COM P/N 10043601
FOXCONN P/N CUDA005C-K14
USB 1.1 cable with a Type A male on one end and a Type B Male on the other. White jacket with molded strain relief on connectors.

L: 5ft. **WT:** .2

STOCK #	DESC.	1EA
17973-CB	5ft. White USB Cable	$0.59

THIN GENDER CHANGERS



A B C D

Gold plated pins.
Description is gender changer configuration.

WT: .1

STOCK #	FIG.	DESCRIPTION	1EA	5+EA
7006-PL	A	DB-9 Male/Male	$1.95	$1.65
7007-PL	A	DB-9 Female/Female	$1.95	$1.65
11216-PL	B	DB-15 Male/Male	$2.95	$2.39
11217-PL	B	DB-15 Female/Female	$2.95	$2.39
8036-PL	C	DB-15 Hi Den. M/M	$3.95	$2.49
8037-PL	C	DB-15 Hi Den. F/F	$3.95	$2.49
7008-PL	D	DB-25 Male/Male	$1.95	$1.65
7009-PL	D	DB-25 Female/Female	$1.95	$1.65

USB GENDER CHANGERS

Description is gender changer configuration.

WT: .01

STOCK #	DESC.	1EA	5+EA
12452-CB	A Female/B Female	$3.75	$3.25
12453-CB	A Male/B Female	$3.50	$2.95
12454-CB	A Female/ B Male	$3.50	$2.95
15476-PL	A Male/A Male	$3.50	$2.95
15477-PL	A Male/A Female	$3.50	$2.95
15478-PL	A Female/A Female	$3.50	$2.95
15479-PL	B Male/B Male	$3.50	$2.95
15480-PL	B Female/B Female	$3.50	$2.95

20" SATA CABLE

MFG: DENGSHENG
SATA Male/Male internal data cable for drive connection. Both ends have Latches.

L: 20" **WT:** .02

STOCK #	DESC.	1+EA
18777-CB	20" SATA Cable	$2.95

UNIVERSAL USB CABLE SET

USB 2.0 adapter set includes 6ft. cable with adapter plugs. Adapters are: Type A Male, Type B Male, Mini A Male & Mini B Male.

L: 6ft. **WT:** .22

STOCK #	DESC.	1+EA
19211-CB	4in1 USB Adaptors Set	$5.95

4 FT USB CABLE

4ft. USB cable with a Type A male on one end and a Type B Male on the other. Black jacket with molded black strain reliefs.

L: 4ft. **WT:** .15

STOCK #	DESC.	1+EA
19272-CB	4ft. Black USB Cable	$0.59

2.0 USB CABLE

USB 2.0 cable with a TYPE A male on one end and a Type B Male on the other. Black or Platinum jacket

L: 36" **WT:** .1

STOCK #	DESC.	1+EA	25+EA
19384-CB	36"USB Cable Platinum	$0.99	----
18976-CB	36"USB Cable Black	$1.49	$1.25

VIDEO COAX TO UTP CONVERTER

Isolated balun converts video signals using coaxial cable to telcom UTP cable (CAT 3-5). Sends color video up to 1200ft Bandwidth 35Hz to 4.5MHz. Transpedance: 75ohm unbalanced to 100 ohm balanced. Use existing phone wiring to send video. **Screw terminals**/BNC male connectors. 2" leads. **1 needed at each end, Sold as Singles**

WT: .08

STOCK #	DESC.	1EA
19458-ST	Screw BNC/UTP Balun	$2.95

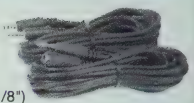
VIDEO COAX TO UTP CONVERTER

Isolated balun converts video signals using coaxial cable to telcom UTP cable (CAT 3-5). Sends color video up to 1200ft Bandwidth 35Hz to 4.5MHz. Transpedance: 75ohm unbalanced to 100 ohm balanced. Use existing phone wiring to send video. **Compression terminals**/BNC male connectors. 2" leads.
1 needed at each end, Sold as Pair

L: 7-1/4" **WT:** .12

STOCK #	DESC.	1Pair
19457-ST	Compress Pair BNC/UTP Balun	$4.95

1/8" PHONE STEREO CABLES

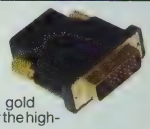


Single cable with 3.5mm (1/8") stereo cables. For audio or video equipment patching. Black cable with molded connectors. M = Male, F = Female.

WT: .12

STOCK #	DESC.	1EA	10+EA
11291-CB	12ft. 3.5mm M/F Cable	$1.69	$1.49
11292-CB	12ft. 3.5mm M/M Cable	$1.69	$1.49
11293-CB	6ft. 3.5mm M/M Cable	$1.65	$1.49

HDMI/DVI ADAPTERS



HDMI/DVI Cable adapters with gold plated connectors. Top quality for the highest quality viewing.

WT: .1

STOCK #	DESCRIPTION	1EA	5+EA
16870-PL	HDMI-F to DVI-M	$11.95	$9.95
16871-PL	HDMI-M to DVI-F	$11.95	$9.95

6FT HDMI CABLE

HDMI (High Definition Multimedia Interface) cable with filters on both ends. Top quality signal for all Hi-Def. TV, Set Top cable boxes, recorder/players etc. Supports standard, enhanced, & High Definition video plus standard & surround sound.

L: 2m (6ft.) **WT:** .4

STOCK #	DESC.	1EA
19166-CB	Hi Def. TV Cable	$14.95

6FT HDMI CABLE

HDMI (High Definition Multimedia Interface) cable for Top quality signal for all Hi-Def. TV, Set Top cable boxes, recorder/players etc. Supports standard, enhanced, & High Definition video plus standard & surround sound.

L: 6ft. **WT:** .2

STOCK #	DESC.	1EA
30028-CB	Hi Def. TV Cable	$5.95

RG-58 CABLES WITH BNC CONN.

Cable with BNC Male connectors on both ends. Black with molded strain relief.

STOCK #	DESCRIPTION	WT.	1EA	10+EA
8011-CB	10ft 50ohm RG-58	1	$3.95	$3.49
8012-CB	25ft 50ohm RG-58	1	$4.95	$4.49
8013-CB	50ft 50ohm RG-58	1.5	$8.95	$7.49
8014-CB	100ft 50ohm RG-58	5	$15.95	$14.95

RG-59 CABLE WITH BNC CONN.

Convienent lengths of black 75 ohm RG-59 CCTV cables. With strain relieved male BNC connectors on both ends. Use to interconnect Cameras, Monitors, Switchers etc.

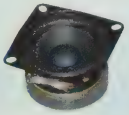
STOCK #	DESCRIPTION	WT.	1EA	25+EA
8952-CB	3ft. RG-59 Cable	.3	$3.25	$2.95
8953-CB	6ft. RG-59 Cable	.6	$3.85	$3.49
8954-CB	12ft. RG-59 Cable	2	$4.50	$3.95
8955-CB	25ft. RG-59 Cable	3.1	$5.95	$5.49
8956-CB	50ft. RG-59 Cable	4.2	$8.95	$7.95
12386-CB	100ft. RG-59 Cable	8.5	$14.95	$12.95

CAMERA VIDEO/POWER CABLE

Siamese cable for cameras. Cable splits out 8" from ends into a video cable with a BNC male on one end and a RCA male on other and a power cable with a 2.1mm I/D coaxial power Plug on end (same end as video RCA) and a 2.5mm I/D power Jack on other. Includes a BNC Male to RCA Female adapter.

STOCK #	DESC.	WT.	1EA
15460-WI	25ft. Camera Cable	0.6	$6.95
15461-WI	50ft. Camera Cable	1.8	$9.95
15462-WI	100ft. Camera Cable	3.4	$17.95
15463-WI	150ft. Camera Cable	4.9	$22.95

MINI 4 OHM SPEAKER

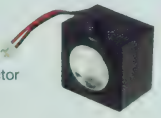


Gento P/N SP99023A, Mini 4 Ohm, 2" paper cone speaker with ferrite magnet.

Sq: 2-1/16" **H:** 1-1/2" **WT:** .28

STOCK #	DESC.	1EA	25+EA
14618-SP	Mini Speaker	$1.49	$1.25

MINI SPEAKER



Quality Micro speaker permanently mounted in a 32mm² X 28mm ABS plastic box. 3in. leads with a 0.1in. pitch micro connector out the back.
Rated: 8ohms +-15%
Frequency range: 200-20KHz.
Resonant Frequency: ~240Hz
Power: 2W RMS
SPL: ~78 +-3dB @1W & .5m
Rubber edged Aluminized Mylar cone with copper coil.

SQ: 1-1/4" **T:** 1" **WT:** .09

STOCK #	DESC.	1EA
31867-SP	2W Micro Speaker in Case	$3.95

CB/RADIO EXTENSION CABLES

10in. long, Small,flat pin extension cables. Male connector on one end, mating Female on other. Color coded wires.
.110" flat quick connect type Pins in plastic housing.

L: 10"

STOCK #	DESC.	WT.	1EA
17854-CB	2 Pin Extension Cable	.02	$1.29
17856-CB	3 Pin Extension Cable	.03	$1.95
17858-CB	4 Pin Extension Cable	.05	$1.95
17859-CB	6 Pin Extension Cable	.07	$2.95
17860-CB	9 Pin Extension Cable	.09	$4.59

CB/RADIO EXTENSION CABLES

10in. long, Round pin extension cables. Male connector with .084"O/D round on one end, mating Female on other. Color coded wires. Plastic housing.

L: 10"

STOCK #	DESC.	WT.	1EA
17861-CB	3 Pin Extension Cable	.033	$2.95
17862-CB	6 Pin Extension Cable	.066	$4.59
17863-CB	9 Pin Extension Cable	.10	$6.95
17864-CB	12 Pin Extension Cable	.11	$9.95
17865-CB	15 Pin Extension Cable	.13	$12.95

BATTERY CLIP TO COAXIAL PLUG

9V Battery Cap to a molded 5.5mm/ 2.1mm coaxial Plug with 2-1/2in. wire leads in between.

L: 4-1/2" **WT:** .009

STOCK #	DESC.	1EA
31085-AD	Battery Clip Adaptor	$0.99

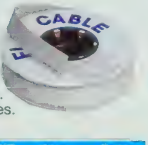
9V BATTERY CLIPS

Type A: Side exit, vinyl , 4" tinned red & black leads.
Type B: End exit, vinyl cover, 6" tinned red & black leads

WT: .004

STOCK #	DESC.	1EA	25+EA
6392-BT	Side Exit 9V Clip	$0.25	$0.22
2600-BT	End Exit 9V Clip	$0.19	$0.17

RIBBON CABLE



100ft rolls of multiconductor flat ribbon cable. .050" conductor spacing to match up to IDC connectors. Stranded, 28 awg, 105deg "C" 300 volt insulation. Gray PVC insulation with tracer on one edge. For SCSI, disc drive and other cables.

L: 100ft.

STOCK #	DESC.	WT.	1EA	5+EA
8566-WI	9 Conductor Flat	1.5	$16.95	$12.95
8568-WI	20 Conductor Flat	2.7	$34.95	$29.95
8569-WI	25 Conductor Flat	3.4	$33.95	$29.95
8570-WI	34 Conductor Flat	5	$45.95	$43.95
8571-WI	40 Conductor Flat	6	$57.95	$56.95
8572-WI	50 Conductor Flat	7	$69.95	$64.95

THOUSANDS MORE ITEMS ON MPJA.COM

EURO TERMINAL BLOCK

12 position, double entry, Euro style terminal blocks. 10mm terminal Spacing & mounting holes.
Voltage: 300V/Rated Current: 30A
Wire: 12-22AWGSolid/Stranded 10AWG Solid
Recessed screws in top. UL/VDE/CE Listed. RoHS compliant

L: 4-5/8" **H:** 11/16" **W:** 13/16" **WT:** .08

STOCK #	DESC.	1EA
18538-TS	12 Pos. Euro Strip	$2.95

TERMINAL STRIP

7.62mm (.30in.) Pitch, 2 position, end stackable, P.C. mount, terminal blocks.
Voltage: 300V/Rated Current: 20A
Wire: 12-22AWG
Steel screws , Tin plated brass terminals

L: 16mm **H:** 12.4mm **W:** 12mm **WT:**.006

STOCK #	DESC.	1EA
30164-TS	2 Pos. 7.62mm Terminal Strip	$0.59

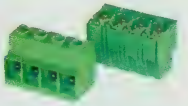
HEADER PIN & PLUGS

2 or 3 position, end stackable, Header Pin & Plug Pairs.
PC Mount Header Pins, Right Angle
Screw clamp Sockets.
Pin Spacing: 5.08mm C/C. Wire: 14-22AWG
Rated:Voltage: 300V/ Current: 15A. CSA Listed
SOLD AS PIN & PLUG PAIRs

L: 10/15mm **H:** 15mm **T:** 15.2mm **WT:** .01

STOCK #	DESC.	1EA	10+EA
19590-TS	2 Pos. Pin/Plug Pair	$0.79	$0.69
19591-TS	3 Pos. Pin/Plug Pair	$0.99	$0.89

HIGH POWER TERMINAL BLOCK



4 position, end stackable, P.C. mount, terminal blocks.
Voltage: 1000V/Rated Current: 90A
Wire: 2-20AWG,35mm²
Recessed screws in top. RoHS compliant

L: 60mm **H:** 39mm **W:** 31mm **WT:** .18

STOCK #	DESC.	1EA
18522-TS	4 Pos. Hi-Power Strip	$1.25

QUICK CONNECT SPEAKER TERMINAL

2 position red & black terminal strip for speakers, audio equipment etc. Solder tabs on back.

WT: .03

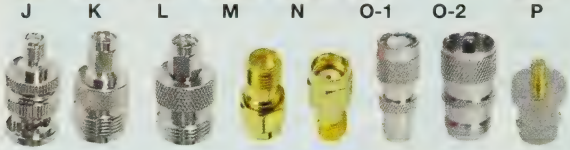
STOCK #	DESC.	1EA	10+EA
4298-TS	2 Pos. Quick Connect	$0.50	$0.39

SPEAKER BINDING POSTS

Pair of Red & Black spring loaded speaker Binding Posts. Press to open, holds up to10AWG Wire. Includes mounting nuts & solder tab, mounts in 5/32" hole

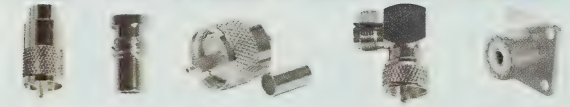
Dia: 1/2" **H:** 1-1/2" O/A **WT:** .05

STOCK #	DESC.	1SET
30346-BP	Pair Speaker Posts	$4.95



INTERSERIES ADAPTORS

STOCK #	FIG.	DESCRIPTION	WT	1EA	10+EA
0586-RC	A	"F" Male Quick conn. "F" Female	.02	$0.50	$0.39
0590-RC	B	"F" Female to RCA Male	.01	$0.75	$0.59
0540-RC	C	"F" Female to BNC Male Adaptor	.08	$1.30	$0.95
0591-RC	D	"F" Male to BNC Female Adaptor	.01	$1.50	$1.19
0519-RC	E	BNC Male to UHF Female UG255	.05	$2.50	$1.95
0518-RC	F	BNC Female to UHF Male UG273	.05	$1.95	$1.65
7296-RC	G	BNC Male to UHF Male	.01	$4.95	$4.65
7297-RC	H	BNC Female to UHF Female	.01	$2.95	$2.75
0521-RC	I	BNC Female to "N" Male UG201	.77	$2.50	$1.95
0574-RC	J	BNC Female to "N" Female	.06	$4.95	$4.75
0523-RC	K	BNC Male to "N" Female UG349	.07	$3.95	$3.65
0548-RC	L	BNC Female to RCA Male	.02	$1.30	$0.95
0549-RC	M	BNC Male to RCA Female	.02	$1.25	$0.95
7298-RC	N	BNC Male to RCA Male	.01	$2.10	$1.69
11843-RC	O-1	SMA Male-BNC Female	.02	$2.79	$2.59
31292-RC	O-2	SMA Male to BNC Female	.01	$4.95	$4.75
11844-RC	P	SMA Male-BNC Male	.02	$4.95	$4.75
11845-RC	Q	SMA Female-BNC Male	.02	$2.95	$2.59
11846-RC	R	SMA Male-UHF Female	.02	$2.99	$2.65
11849-RC	S	SMA Male- "N" Female	.02	$2.99	$2.65
30146-RC	T	SMA Male-Reverse Polarity Female	.02	$2.49	$2.25
30147-RC	U	SMA Female-Reverse Polarity Male	.02	$2.49	$2.25
0578-RC	V	TNC male to BNC Female	.04	$2.50	$1.95
0522-RC	W	UHF Male to "N" Female	.09	$3.95	$3.65
31293-RC	X	MCX Male to BNC Female	.02	$4.95	$4.75



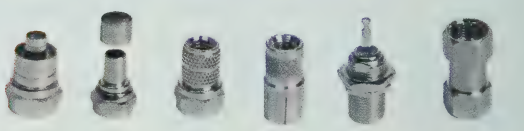
UHF CONNECTORS

STOCK #	FIG.	TYPE	RG CABLE/DESCRIPTION	WT.	1EA	25+EA
0500-RC	A	PL-259	8,11,213,214 cable, Solder Type UHF Male	.02	$1.30	$1.25
4690-RC	A	PL-259	8,11,213,214 cable, Solder Type Silver Plated	.02	$2.20	$2.10
5443-RC	A	PL-259	59 cableTwist-on Male	.05	$1.25	$1.10
4691-RC	B	175	Silver Plated Reducer For 58U	.01	$0.59	$0.55
4692-RC	B	176	Silver Plated Reducer For 59U	.01	$0.59	$0.55
5438-RC	C	PL-259	58 cable 2 Piece Crimp UHF Male	.05	$1.65	$1.45
5439-RC	C	PL-259	59 cable 2 Piece Crimp UHF Male	.05	$1.25	$0.99
0504-RC	D	M-359	UHF "Elbow" 1 Female-1 Male	.1	$2.00	$1.79
0501-RC	E	SO-239	UHF Female 4 Hole Panel Mount	.1	$1.75	$1.60
0583-RC	F	363	UHF Threaded Bulkhead 2 Females	.1	$3.95	$3.75

BNC CONNECTORS

STOCK #	FIG.	DESCRIPTION	WT	1EA	25+EA
0508-RC	A	BNC Coupler 2 Female	.1	$1.00	$0.89
0510-RC	B	BNC "Elbow" UG306	.1	$2.50	$1.95
0511-RC	C	BNC "T" 2 Female & 1 Male	.1	$2.25	$1.99
5437-RC	D	BNC "T" 3 Male Connectors	.1	$4.95	$4.49
6518-RC	E	BNC LAN "T" 2 Female & 1 Male	.1	$4.99	$4.59
0557-RC	G	BNC Bulkhead 2 Female Not Iso. UG492	.1	$2.95	$2.59
5435-RC	G	BNC Bulkhead 2 Female Isolated UG492	.1	$3.35	$2.79
0507-RC	H	BNC Female Panel Mount UG1094	.1	$1.00	$0.89
9224-RC	I	BNC Female 4 Hole Panel Mount UG-290	.1	$1.69	$1.59
5401-RC	J	3 Piece Crimp BNC Male for RG58	.02	$1.25	$0.99
5402-RC	J	3 Piece Crimp BNC Male for Teflon RG58	.02	$1.25	$0.99
5403-RC	J	3 Piece Crimp BNC Male for RG6,59	.02	$1.25	$0.99
5426-RC	K	2 Piece Crimp BNC Male for RG58	.02	$1.20	$0.99
3999-RC	L	2 Piece Crimp BNC Female for RG58	.02	$1.25	$0.99
19263-RC	M	Compression type BNC Male for RG58	.02	$0.89	$0.79
19264-RC	M	Compression type BNC Male for RG59	.02	$0.89	$0.79
19265-RC	M	Compression type BNC Male for RG6	.02	$0.89	$0.79

"F" TYPE CONNECTORS



Type "F" connectors are used to match Antenna & Cable TV equipment to Audio/Visual Jacks on VCRs. Monitors, Switchers etc. **WT:** .01

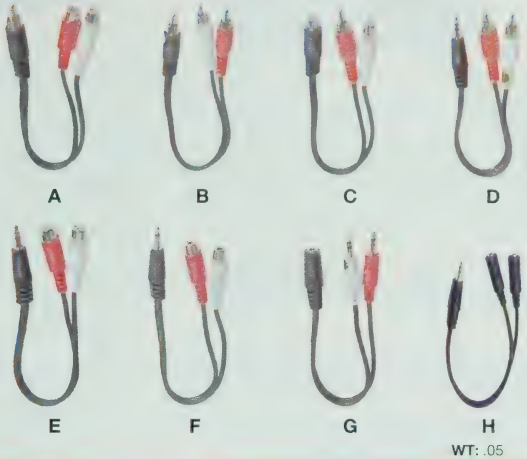
STOCK #	FIG.	TYPE	CABLE	DESCRIPTION	1EA	10+EA
0538-RC	A	F-59	59U	Male Cable Attached 1/4 Ring	$0.20	$0.16
9231-RC	B	F-59	6U	Male Cable separate 1/4 Ring	$0.17	$0.16
9232-RC	B	F-59	59U	Male Cable separate 1/4 Ring	$0.17	$0.16
5451-RC	C	F-56T	6U	Male Cable Twist-on	$0.35	$0.29
0563-RC	C	F-59T	59U	Male Cable Twist-on	$0.35	$0.29
0588-RC	D		59U	Male Twist-on Quick Connect	$0.35	$0.29
0539-RC	F	F-61		Female Panel Mount with Nut	$0.49	$0.39
5454-RC	G	F-71		Male to Male In-line	$0.69	$0.55
0541-RC	H	F-81		Female to Female Bulkhead with Nut	$0.49	$0.39
7097-RC	I			Male to Female Right Angle Adaptor	$0.75	$0.59
19550-RC	K			"T" connector with 3 Females	$0.39	----
11448-RC	L			Male to RCA Jack	$1.30	$1.19
5456-RC	M			Male 75ohm Terminator 1/2W	$0.33	$0.29

AUDIO ADAPTORS

WT: .01

STOCK #	FIG.	DESCRIPTION	1EA	10+EA
11295-AD	A	RCA Jack to RCA Jack	$0.45	$0.36
11296-AD	B	RCA Plug to RCA Plug	$0.49	$0.39
19461-AD	C	3.5mm Stereo Jack to 3.5mm Stereo Jack	$1.95	$1.59
11298-AD	D	3.5mm Mono Jack to 2.5mm Mono Plug	$0.95	$0.79
11299-AD	E	RCA Jack to 3.5mm Mono Plug	$0.95	$0.79
11300-AD	F	2X 3.5mm Stereo Jack to 3.5mm Stereo Plug	$1.25	$0.99
11301-AD	G	RCA Jack to 1/4" Mono Plug	$0.75	$0.59
11302-AD	H	1/4" Mono Jack to RCA Plug	$0.95	$0.79
11303-AD	I	3.5mm Mono Jack to RCA Plug	$0.95	$0.79
11304-AD	J	1/4" Mono Jack to 3.5mm Mono Plug	$0.75	$0.59
11305-AD	J	1/4" Stereo Jack to 3.5mm Stereo Plug	$0.95	$0.79
11306-AD	L	3.5mm Mono Jack to 1/4" Mono Plug	$0.75	$0.59
11307-AD	L	3.5mm Stereo Jack to 1/4" Stereo Plug	$0.75	$0.59
11308-AD	M	2X 1/4" Stereo Jack to 3.5mm Stereo Plug	$1.75	$1.39
11309-AD	N	2X 3.5mm Stereo Jack to 1/4" Stereo Plug	$1.50	$1.19
11400-AD	O	3.5mm Mono to 3.5/1.3mm ID Coxial Plug	$1.50	$1.25
11401-AD	P	3.5mm Mono to 6.5/3mm ID Coxial Plug	$1.50	$1.19
15334-PL	Q	Red RCA Plug to Jack Rt. Ang Adapter	$0.79	$0.64
15335-PL	Q	Black RCA Plug to Jack Rt. Ang Adapter	$0.79	$0.64

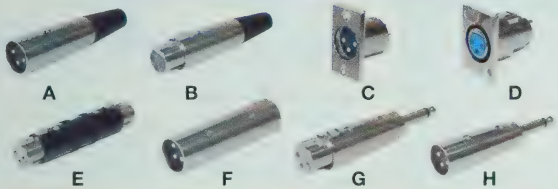
AUDIO ADAPTOR & SPLITTER CABLES



WT: .05

STOCK #	FIG.	DESCRIPTION	1EA	10+EA
11420-AC	A	Black RCA Plug to Red/White RCA Jack (Y)	$0.89	$0.69
11421-AC	B	Black RCA Plug to Red/White RCA Plug (Y)	$0.89	$0.69
11422-AC	C	Black RCA Jack to Red/White RCA Plug (Y)	$0.89	$0.69
11423-AC	D	3.5mm St. Plug to Red/White RCA Plug (Split)	$0.95	$0.79
11424-AC	E	3.5mm St. Plug to Red/White RCA Jack (Split)	$0.95	$0.79
11425-AC	F	3.5mm Mno. Plug to Red/White RCA Jack (Y)	$0.95	$0.79
11426-AC	G	3.5mm St. Jack to Red/White 3.5mm St. Plug (Y)	$0.95	$0.79
11427-AC	H	3.5mm St. Plug to 3.5mm St. Jacks (Y)	$0.95	$0.79

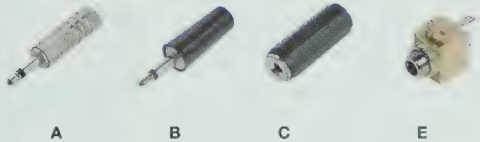
3 PIN XLR MIKE CONNECTORS



WT: .01

STOCK #	FIG.	DESCRIPTION	WT.	1EA	10EA
2983-PL	A	XLR Cable Male Mike Connector	.2	$2.49	$2.25
2971-PL	B	XLR Cable Female Mike Connector	.2	$2.49	$2.25
2972-PL	C	XLR Male Chassis Mike Connector	.2	$2.25	$1.79
3136-PL	D	XLR Female Chassis Mike Connector	.2	$3.95	$2.95
11403-PL	E	XLR Female to Female Inline Conn.	.15	$4.45	$3.59
11404-PL	F	XLR Male to Male Inline Conn.	.13	$4.25	$3.39
11405-PL	G	XLR Female to 1/4" Mono Plug	.1	$4.25	$3.39
11406-PL	H	XLR Male to 1/4" Mono Plug	.1	$3.95	$2.95

1/8" (3.5MM) PHONE PLUGS & JACKS



WT: .004

STOCK #	FIG.	DESCRIPTION	1EA	10EA	100+EA
2187-PL	A	Mono Plug Metal Back	$0.52	$0.43	$0.35
1868-PL	B	Mono Plug Plastic Back	$0.15	$0.13	$0.10
5514-PL	A	Stereo Plug Metal Back	$0.64	$0.53	$0.43
4015-PL	B	Stereo Plug Plastic Back	$0.37	$0.31	$0.25
1927-PL	C	Mono Jack Plastic Back	$0.50	$0.46	$0.39
5515-PL	E	Stereo Enc. Panel Jack	$0.38	$0.32	$0.25

RCA CONNECTORS

WT: .004

STOCK #	FIG.	TYPE	DESCRIPTION	1EA	10EA	100+EA
4674-PL	A	Plug	Red Plastic Back	$0.19	$0.16	$0.13
4675-PL	A	Plug	Black Plastic Back	$0.19	$0.16	$0.13
5518-PL	B	Plug	Metal Back	$0.57	$0.47	$0.38
5519-PL	C	Jack	Red Plastic Back	$0.23	$0.19	$0.15
5520-PL	C	Jack	Black Plastic Back	$0.23	$0.19	$0.15
5521-PL	D	Jack	Metal Back	$0.76	$0.63	$0.51
5522-PL	E	Jack	Panel Mount	$0.41	$0.34	$0.27

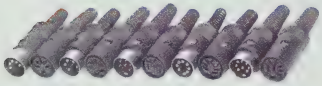
1/4" PHONE PLUGS

A/C = Normally Closed Auxillary Tip Contact

WT: .02

STOCK #	FIG.	DESCRIPTION	1EA	10EA	100+EA
7236-PL	A	Mono Plug Metal Back	$0.72	$0.60	$0.48
7237-PL	B	Mono Plug Plastic Back	$0.48	$0.40	$0.32
7238-PL	A	Stereo Plug Metal Back	$0.97	$0.81	$0.64
7239-PL	B	Stereo Plug Plastic Back	$0.52	$0.43	$0.35

STANDARD DIN CABLE CONNECTORS



WT: .02

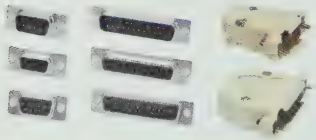
STOCK #	TYPE	DESC.	1EA	25EA	100+EA
5607-PL	Male	5 Pin 45°	$0.42	$0.35	$0.28
5608-PL	Female	5 Pin 45°	$0.63	$0.53	$0.42
5611-PL	Male	6 Pin	$0.48	$0.40	$0.32
5612-PL	Female	6 Pin	$0.72	$0.60	$0.48
5614-PL	Female	7 Pin	$0.81	$0.68	$0.54
5615-PL	Male	8 Pin	$0.56	$0.46	$0.37

MINI DIN CABLE CONNECTORS

WT: .02

STOCK #	TYPE	DESC.	1EA	25EA	100+EA
5601-PL	Male	4 Pin	$0.87	$0.73	$0.58
5603-PL	Male	6 Pin	$1.05	$0.88	$0.70
5605-PL	Male	8 Pin	$1.46	$1.21	$0.97

DB CONNECTORS



WT: .05

STOCK #	DESC.	1EA	25+EA
2856-PL	DB-9 Male Solder	$0.24	$0.19
2857-PL	DB-9 Female Solder	$0.28	$0.24
5395-PL	DB-15 Male Hi Den.	$0.69	$0.59
5394-PL	DB-15 Female Hi Den.	$0.79	$0.69
2859-PL	DB-9 Plastic Hood	$0.39	$0.35
2860-PL	DB-15 Male Solder	$0.45	$0.36
2861-PL	DB-15 Female Solder	$0.45	$0.36
0133-PL	DB-15 Hood	$0.75	$0.59
2444-PL	DB-25 Male Solder	$0.39	$0.29
2445-PL	DB-25 Female Solder	$0.59	$0.49
2446-PL	DB-25 Plastic Hood	$0.39	-----
0134-PL	DB-37 Hood	$1.00	$0.79
6949-PL	DB-50 Male Solder	$1.95	$1.59
0136-PL	DB-50 Hood	$1.25	$0.95

DB PC MOUNT CONNECTORS

Right angle PC mount connectors. Metal face, gold plated contacts. 3/4" from face to back.

WT: .02

STOCK #	DESC.	1EA	25+EA
4840-PL	DB-9 Female 90° Mount	$0.59	$0.55
4896-PL	DB-9 Male 90° Mount	$0.59	$0.55
5687-PL	DB-15 Male 90° Mount	$0.65	$0.58

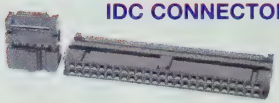
PC MOUNT DB-9 CONNECTORS

Vertical PC mount connectors. Metal face, gold plated contacts. 1/2" from face to back, 11/16" O/A.

WT: .02

STOCK #	DESC.	1EA
31861-PL	DB-9 Male Vert. Mount	$0.49
31862-PL	DB-9 Female Vert. Mount	$0.49

IDC CONNECTORS



Insulation displacement header connectors. Gold plated, .025 square pins with .100 spacing.

WT: .03

STOCK #	DESC.	1EA	25+EA
0891-HC	10 (2X5) Socket Header	$0.39	$0.29
0893-HC	16 (2X8) Socket Header	$0.68	$0.59
2883-HC	20 (2X10) Socket Header	$0.75	$0.59
0895-HC	26 (2X13) Socket Header	$0.75	$0.59
4709-PL	34 (2X17) Socket Header	$0.45	$0.32
2884-HC	40 (2X20) Socket Header	$0.49	$0.39
4710-PL	50 (2X25) Socket Header	$0.49	$0.39

TELCO TYPE TEST CLIPS

Mueller JP-8078, 2-1/4"Angled Telco alligator clips with cable piercing tool steel spike. Designed to grip punch-down blocks as well as wire posts etc. Nickel-silver, with brass screw, washer & bronze lock washer. Includes pair of clips plus 1 Red & 1 Black flexible vinyl boot. For test leads, clip leads, or test jigs.
L: 2-1/4" **WT:** .088

STOCK #	DESC.	1EA
18160-TL	Mueller Telco Gator Clips	$4.95

BATTERY CLIPS & BOOTS

Handy mesh jaw, steel battery clip with insulated Red or Black Vinyl plastic boot. Amp listed is Max for part.

STOCK #	DESC.	WT.	1EA	5+EA
16437-BC	5A Clip Red	.015	$0.25	$0.15
16438-BC	5A Clip Black	.015	$0.25	$0.15
16439-BC	10A Clip Red	.05	$0.35	$0.25
16440-BC	10A Clip Black	.05	$0.35	$0.25
16441-BC	20A Clip Red	.03	$0.40	$0.30
16442-BC	20A Clip Black	.03	$0.40	$0.30
16443-BC	30A Clip Red	.04	$0.45	$0.35
16444-BC	30A Clip Black	.04	$0.45	$0.35
16445-BC	50A Clip Red	.06	$0.59	$0.49
16446-BC	50A Clip Black	.06	$0.59	$0.49

ALLIGATOR CLIPS & BOOTS

Alligator clips with Red or Black Vinyl boot. Solder or crimp. mm listed is length of metal clip

STOCK #	DESC.	WT.	1EA	5+EA
16450-AL	27mm Clip Red	.003	$0.10	$0.05
16451-AL	27mm Clip Blk	.003	$0.10	$0.05
16452-AL	35mm Clip Red	.005	$0.15	$0.07
16453-AL	35mm Clip Blk	.005	$0.15	$0.07
16454-AL	45mm Clip Red	.009	$0.19	$0.09
16455-AL	45mm Clip Blk	.009	$0.19	$0.09
16456-AL	50mm Clip Red	.013	$0.29	$0.12
16457-AL	50mm Clip Blk	.013	$0.29	$0.12

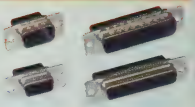
DUAL BINDING POSTS

Red & Black, safety binding posts accept banana plug in top or wire through hole in side. All front panel connections are recessed to pervent contact. Mounts in double .50" holes on .75" ctr. Solder terminals onback.

WT: .07

STOCK #	DESC.	1EA	10+EA
14492-PL	Dual BindingPost	$1.95	$1.75

DB CRIMP CONNECTORS



Metal face DB Housings for crimp pins (Not included)

WT: .1

STOCK #	DESC.	1EA	25+EA
16251-PL	DB-9 Male Crimp	$0.59	$0.49
16252-PL	DB-9 Female Crimp	$0.59	$0.49
16253-PL	DB-15 Male Crimp	$0.69	$0.59
16254-PL	DB-15 Female Crimp	$0.69	$0.59
16255-PL	DB-25 Male Crimp	$0.69	$0.59
16256-PL	DB-25 Female Crimp	$0.69	$0.59
16257-PL	DB-37 Male Crimp	$1.19	$0.99
16258-PL	DB-37 Female Crimp	$1.19	$0.99
16259-PL	DB-50 Male Crimp	$2.99	$2.79
16260-PL	DB-50 Female Crimp	$2.99	$2.79
16261-PL	DB-15 Male Hi Den.	$0.79	$0.69
16262-PL	DB-15 Female Hi Den.	$0.79	$0.69

DB CRIMP PINS

3 micro inch Gold over 50micro in. nickel for 24-28AWG Wire

STOCK #	DESC.	1EA	4+EA
16265-PL	Male Crimp Pin/100	$4.99	$4.49
16266-PL	Female Crimp Pin/100	$4.99	$4.49
16269-PL	HD Male Crimp Pin/100	$4.99	$4.49
16270-PL	HD Female Crimp/100	$4.99	$4.49
16271-PL	HD Male Crimp/5KReel	$99.00	---
16272-PL	HD Female Crimp/5KReel	$99.00	---

DB CONNECTOR PIN CRIMP TOOL

Multi Purpose Crimp Tool
Features: Cushioned Grips.
Use: Crimping Open (stamped) D-Sub Pins, Ternimal Lugs. For 14-26 AWG Wire,
NOTE: Will not crimp High Density DB Pins.

WT: .6

STOCK #	DESC.	1EA	10EA
11763-TL	Multi Crimp Tool	$9.95	$7.95

DB CRIMP PIN EXTRACTOR

Tool used to extract crimp pins from insertion type DB connectors. Double ended For Pin & Socket type connectors (16251-PL - 16262-PL)

WT: .03

STOCK #	DESC.	1EA
17124-TL	DB-Crimp Pin Extractor	$4.75

STACKABLE BANANA PLUGS

Stackable Banana plugs with nickel plated brass body with Four leaved Beryllium copper spring tip, ABS cover. Screw connection. Rated 24A@30VAC/60VDC
H: 1-17/32" **WT:** .001

STOCK #	DESC.	1EA	10+EA
19576 -PL	Red Banana Plug	$0.49	$0.45
19577-PL	Black Banana Plug	$0.49	$0.45

BANANA PLUGS

Standard Red & Black banana plugs with nickel plated brass Four leaved spring tip, thermoplastic cover. Solder connection.

WT: 05

STOCK #	DESC.	1EA	10+EA
8070-PL	Red Banana Plug	$0.25	$0.19
8071-PL	Black Banana Plug	$0.25	$0.19

POWER CORD SPECIAL

6ft, 18-3 AWG, black PVC jacketed power cords. Standard 3 prong male molded plug on one end, & 3 blade molded IEC C-13 female on the other. 120VAC 10A rated.

L: 6fl WT: .5

STOCK #	DESC.	1EA
7378-WI	6ft. IEC Power Cord	$3.49

3FT. IEC C7 CORD SET

3ft, 18-2 AWG, SPT-2 black power cord. Standard 2 blade Polarized molded plug on one end, IEC Class 2-C7, 2 pin female notebook/laptop or equipment plug on other. 120VAC, 10A rated. ETL/canada/us listed.

L: 3ft. (1m) WT: .12

STOCK #	DESC.	1EA
31448-CB	3ft. IEC C7 Polarized Cordset	$0.99

5.8 FT,18-3 AWG IEC POWER CORD

5ft; 10in ,18-3 AWG SVT Blackjacket, power cord for electronic equipment. Standard 3 prong molded plug on one end, IEC Class 1-C5 female (3 round sockets) on other end. UL/CSA listed. Rated 7A/125VAC

L: 5.8ft WT: .32

STOCK #	DESC.	1EA
31467-CB	5.8 ft IEC Cordset	$1.95

6FT. LAPTOP CORD

6ft,18-3 AWG power cord used with some desktop power supplies & equipment. Standard 3 prong molded plug on one end, IEC Class 1-C5 female (3 round sockets) on other end. SVT Black jacket. Rated 120VAC 2.5A. UL/CSA Listed, RoHS.

L: 6ft. WT: .33

STOCK #	DESC.	1EA
18069-CB	IEC C-5Power Cord	$1.95

6FT. LAPTOP ADAPTER CORD

6ft,18-3 AWG power adapter cord IEC Class 1-C5 female (3round sockets) used with some desktop power supplies & equipment on one end and a IEC 60320-Sheet E 3 blade shrouded plug on other end (Mates Std. IEC C-13 cord end). SVT Black jacket. Rated 120VAC 10A. UL/CSA Listed,

L: 6ft WT: .5

STOCK #	DESC.	1EA
18764-CB	6ft Laptop Adapter Cord	$3.95

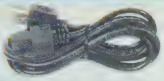
3FT. IEC C7 CORD SET

3ft, 18-2 AWG, SPT-2 black power cord. Standard 2 blade Polarized molded plug on one end, IEC Class 2-C7, 2 pin female notebook/laptop or equipment plug on other. 120VAC, 10A rated. UL/canada/us listed.

L: 3ft. (1m) WT: .12

STOCK #	DESC.	1EA
31842-CB	3ft. IEC C7 Polarized Cordset	$1.95

6FT. UL 18-3 AWG IEC POWER CORD



6ft,18-3 AWG power cord used in equipment. Standard 3 prong molded plug on one end, std. IEC type C-13 female on other end. Black jacket. UL/CSA listed. Rated 120VAC 10A.

L: 6ft WT: .4

STOCK #	DESC.	1EA	10+EA
12943-CB	6ftUL IEC Cordset	$3.95	$3.49

1FT. IEC POWER CORD

1ft. long, 18-3 SVT, power cord for such items as computers, printers, equip. etc. Std. 3 prong plug on one end and sdt. IEC female on other. Ideal for racks or benches with plug strips, No tangle of cords. CSA listed.

L: 1ft WT: .9

STOCK #	DESC.	1EA	5+EA
14908-WI	1ft IECPower Cord	$2.25	$1.99

SIAMESE IEC CORDSET

10ft, 16-3 AWG, black SJT jacketed power cord with a "Y" split 22in. from IEC end. Standard 3 prong male molded plug on one end, & 3 blade molded IEC C-13 female on each of the other ends. CSA rated 13A@120VAC

L: 10ft O/A WT: 1.2

STOCK #	DESC.	1EA
18849-CB	10ft. IEC Siamese Cord	$14.95

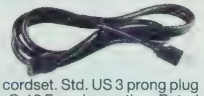
10FT. 18-3 AWG IEC CORDSET

Removed from New Equip. 10ft, 18-3 AWG, Black jacketed power cords. Standard 3 prong male molded plug on one end, & 3 blade molded IEC female on the other. 120VAC/10A/105 "C" rated. UL/CSA Listed

L: 10ft WT: .50

STOCK #	DESC.	1EA
18363-CB	10ft. 18-3 IEC Cord Set	$2.25

80IN. IEC POWER CORD



80in. long, 16-3 SJT, IEC cordset. Std. US 3 prong plug on one end & std. IEC type C-13 Female on other. Rated 15A @ 125VAC. Ideal for racks or benches with plug strips. UL/CSA listed.

L: 80in. WT: .72

STOCK #	DESC.	1EA
19383-CB	80in.14AWG I EC Cordset	$6.95

7FT,18-3 AWG IEC POWER CORD

7ft,18-3 AWG SVT Black jacket, power cord for electronic equipment. Standard NEMA 5, 3 prong molded plug on one end, standard IEC C13, female on other end. Rated 10A/125VAC

L: 7ft WT: .4

STOCK #	DESC.	1EA
31848-CB	7ft IEC 10A Cordset	$2.95

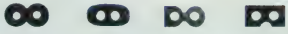
6FT,18-3 AWG IEC POWER CORD

USED 9ft,18-3 AWG SJT dark gray jacket, power cord for electronic equipment. Hospital Grade 3 prong molded plug on one end. UL/CSA listed. Rated 10A/125VAC

L: 9ft WT: .8

STOCK #	DESC.	1EA
31127-CB	9ft IEC Hospital Cord	$3.95

5.5FT. REPLACEMENT CORDS



A B C F

5-1/2ft,consumer power cord. 250VAC/4A Max. 2 blade Non-polarized molded plug on one end, 2 pin female notebook/laptop/Audio/TV equipment plug on other. Black jacket.

L: 5-1/2ft WT: .25

STOCK #	FIG	DESC.	1EA	5+EA
15447-CB	A	Rnd. Non-Polar Cord	$1.25	$0.99
15448-CB	B	Rnd. Non-Polar Cord	$1.25	$0.99
15449-CB	C	Polar Cord Set	$1.25	$0.99
15452-CB	F	Keyed TV Cord	$1.25	$0.99

5.5FT. CLASS-2 CORD

5.5ft,18-2 AWG power cord. USA rated 7A/125V International Rating: 250VAC/2.5A Max. 2 blade Non-polarized molded plug on one end, IEC Class 2-C7, 2 pin female notebook/laptop or equipment plug on other. Black jacket. UL/CSA Listed.

L: 5.5ft. WT: .25

STOCK #	DESC.	1EA
19292-CB	5.5ft. Class 2 Power Cord	$1.95

6FT. RIGHT ANGLE IEC CORDSET

Removed from Equipment, 6ft,18-3 AWG SVT platinum jacket, Right Angle power cord for electronic equipment. Standard 3 prong molded plug on one end, right angle IEC female on other end. Rated 120VAC 10A.

L: 6ft. WT: .34

STOCK #	DESC.	1EA
17730-CB	6ft. Right Angle Cord	$2.49

5FT,18-3 AWG IEC POWER CORD

5ft. 18-3AWG, SVT power cord. Standard 3 prong plug on one end, standard IEC C13 female on other. 120VAC 10A rated. UL/us/canada listed.

L: 5ft. (1.5m) WT: .4

STOCK #	DESC.	1EA	50+EA
31447-CB	5ft IEC 10A Cordset	$2.95	$2.49

IEC EQUIPMENT EXTENSION CABLE

Extension power cord with IEC Male on one end & IEC female on other. Use to extend monitors, computers Etc.

WT: .5

STOCK #	DESC.	1EA
18042-CB	4.5ft Black CSA IEC Ext.	$1.95
18045-CB	6ft Plat. IEC Ext.	$2.50
12462-CB	6 ft Black UL IEC Ext.	$2.50

14FT,18-3 AWG IEC POWER CORD

14ft,18-3 AWG SVT Black jacket, power cord for electronic equipment. Standard NEMA 5, 3 prong molded plug on one end, standard IEC C13, female on other end. Rated 10A/125VAC

L: 14ft WT: .68

STOCK #	DESC.	1EA
31849-CB	14ft IEC 10A Cordset	$6.95

HOSPITAL GRADE AC CORD

9ft. 16-3 AWG, Gray SJT jacketed pigtail power cord. Hospital Grade 3 prong male molded AC plug on one end and stripped back 2in on other end. UL/CSA Listed

L: 9ft **WT:** .8

STOCK #	DESC.	1EA
18851-WI	9ft. Hospital AC Cord	$4.95

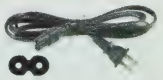
6FT. 18AWG CORD

6ft. ALPHA 18-3AWG SV power cord. Standard 3 blade plug on one end; stripped back 1-1/2in. on other end. Black jacket. UL Listed.

L: 4-1/2ft. **WT:** .30

STOCK #	DESC.	1EA
19307-WI	Alpha 18-3 Power Cord	$3.95

5FT. IEC C7 CORD SET



5ft, 18-2 AWG, SPT-2 black power cord. Standard 2 blade Non- Polarized molded plug on one end, IEC Class 2-C7, 2 pin female notebook/laptop or equipment plug on other. 120VAC, 7A rated. ETL/canada/us listed.

L: 5ft. (1.5m) **WT:** .2

STOCK #	DESC.	1EA
31824-CB	5ft. IEC C7 Cordset Non-Polar	$1.95

16FT,18-3 AWG IEC POWER CORD

16ft,18-3AWG SVT Black jacket, power cord for electronic equipment. Standard NEMA5,3 prong molded plug on one end, standard IEC C13, female on other end. Rated 10A/125VAC

L: 14ft **WT:** .78

STOCK #	DESC.	1EA
31850-CB	16ft IEC 10A Cordset	$7.95

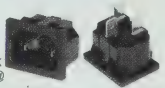
SURGE PROTECTOR

Wall mount surge protector with 4 outlets protected L/N, L/Gnd & N/Gnd. 1875 W max. Load. Protect electronic equipment from electrical spikes. Built in status indicator light. Clamp Volts: 330V. 4ft. line cord. UL listed.

WT: .22

STOCK #	DESC.	1EA
18971-MI	4 Outlets Surge Protector	$8.95

IEC POWER INLET



Snap-in, Chassis mount, Black thermoplastic, 120/220 VAC @ 10A, IEC 60320/C-14 three wire primary power connector. Rated for 70deg. "C". .250" quick connect terminals. UL/CSA listed 15A@250V/ VDE,TUV etc. listed 10A@250V, accepts Std. C-13 Plug

W: 1-3/16" **H:** 1" **D:** 1-1/8" **WT:** .018

STOCK #	DESC.	1EA
18260-PL	Standard IEC Power Inlet	$0.75

PHONE & PAD CHARGER CABLE

3 in One Sync & Charge cable with USB Type A Male to IPhone ® 5,4G,4S,, 3G, 3GS, HTC, IPad Mini ® or any phone with a Micro B Connector.

L: 7" **WT:** .02

STOCK #	DESC.	1EA
31220-CB	USB Charger Adapter Cable	$4.95

POWER SPLIT CABLE

Power Splitter cables with 5.5/2.1mm Power Jack to multiple 5.5/2.1mm Plugs.
30cmO/A with breakout at 18
40cm O/A with Breakout at 24

STOCK #	DESC.	1EA
19450-CB	30cm Dual Split Cable	$3.95
19451-CB	40cm Quad Split Cable	$4.95

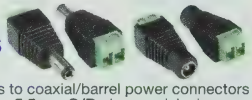
BNC TO TERMINAL ADAPTER

BNC Male connector to Screw Terminal adapter.

L: 1-5/8" **WT:** .03

STOCK #	DESC.	1EA
19456-PL	BNC/UTP Balun	$1.59

POWER ADAPTORS



Adapts wire leads to coaxial/barrel power connectors Screw terminals to **5.5mm O/D** plugs and Jacks.

L: 1-5/8" **WT:** .07

STOCK #	DESC.	1EA
19452-PL	2.1mm I/D Plug Adapter	$0.89
19453-PL	2.5mm I/D Plug Adapter	$0.89
19454-PL	2.1mm I/D Jack Adapter	$0.89
19455-PL	2.5mm I/D Jack Adapter	$0.89

POWER PLUGS

Plastic shell, cable end power connector. Designed for 5.5mm equipment jacks. Solder terminals

L: 1-7/8" **Dia.:** 13/32" **WT:** .007

STOCK #	DESC.	1EA
19084-PL	5.5/2.1mm Power Plug	$0.59
19085-PL	5.5/2.5mm Power Plug	$0.59

POWER JACKS

Plastic shell, cable end power connector. Designed for 5.5mm O/D plugs. Solder terminals

L: 1-5/8" **Dia.:** 13/32" **WT:** .007

STOCK #	DESC.	1EA
19160-PL	5.5/2.1mm Power Jack	$0.99
19161-PL	5.5/2.5mm Power Jack	$0.99

POWER PLUG ADAPTERS

Plastic body Barrel connector, 5.5mm O/D Plug TO 2.5 or 2.1mm I/D Adapters.

L: 1-7/16" **WT:** .014

STOCK #	DESC.	1EA
17573-PL	5.5/2.1F to 5.5/2.5M Adapter	$1.95
18238-PL	5.5/2.5F to 5.5/2.1M Adapter	$1.95

COAXIAL POWER JACKS

Plastic, Chassis mount power connector. Designed for 5.5mmO/D plugs. Aux. contact connected to sleeve with no plug inserted. Solder terminals

L: 7/8" **Mtg. Hole:** 5/16" **Dia.:** 15/32" **WT:** .007

STOCK #	DESC.	1EA
18549-PL	5.5/2.1mm Power Jack	$1.49
18550-PL	5.5/2.5mm Power Jack	$1.49

ECONOMY "MOD" CRIMP PLUGS

Cat-3 Standard crimp-on "Modular" plugs. For flat cable Available for line or handset.

WT: .001

STOCK #	DESC.	1EA	25EA	100+EA
4236-TT	6X4 RJ-11 Plug	$0.15	$0.10	$0.08
4237-TT	6X6 RJ-12 Plug	$0.20	$0.15	$0.12
4238-TT	4X4 Handset Plug	$0.30	$0.25	$0.24

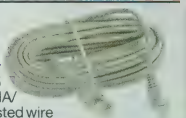
CAT-5 RJ-45 "MOD" CRIMP PLUGS

"Modular" RJ-45 plugs feature .35mm phor-bronze contacts with 50 u-inch gold over 50-100 u- in. nickel plated plating For 24-28AWG solid/stranded wire. Conforms to FCC-68.5 requirements. UL Listed.
2 prong for medium duty use (2 point wire connection)
3 prong for heavy duty use (3 Point wire connection)

WT: .001

STOCK #	DESC.	1EA	25+EA
11118-TT	RJ-45 Stranded Wire	$0.30	$0.28
11119-TT	RJ-45 Solid Wire 2 Prong	$0.35	$0.33
11120-TT	RJ-45 Solid Wire 3 Prong	$0.42	$0.39

CAT- 5 PATCH CABLE

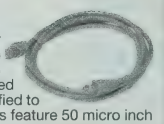


25ft. 24AWG solid conductor UTP, patch cables with RJ-45 (8X8) plugs. Straight wired to EIA/ TIA-568A standards. 100% tested wire sequence & continuity. Verified to EIA/TIA Cat. 5E standards. Plugs feature 50 micro inch gold plated contacts and Molded strain relif. UL/CSA Listed

WT: .3

STOCK #	DESCRIPTION	1EA
31822-TT	25ft. Platinum Cat-5 Cable	$2.99

CAT-5E CABLE



Flexible, stranded conductor patch cables with RJ-45 (8X8) plugs. Straight wired to T568B ATT-258A standards. 100% tested wire sequence & continuity. Verified to EIA/TIA Cat. 5E standards. Plugs feature 50 micro inch gold plated contacts. Conforms to FCCrequirements

L: 7ft **WT:** .18

STOCK #	DESCRIPTION	1EA	10+EA
19234-TT	7ft. Gray Cat-5e Cable	$1.25	$0.99

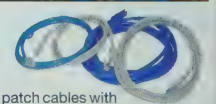
CAT- 5E PATCH CABLE

5ft. Flexible, stranded conductor patch cables with RJ-45 (8X8) plugs. Straight wired to T568B ATT-258A standards. 100% tested wire sequence & continuity. Verified to EIA/TIA Cat. 5E standards. Plugs feature 50 micro inch gold plated contacts. Conforms to FCCrequirements

WT: .06

STOCK #	DESCRIPTION	WT.	1EA	10+EA
30398-TT	5ft. Blue Cat-5e Cable	.06	$0.99	$0.75

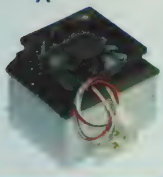
CAT- 5E PATCH CABLES

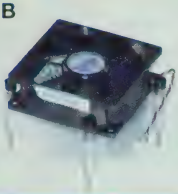


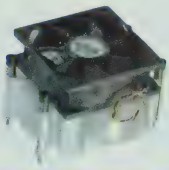
Flexible, Solid conductor patch cables with RJ-45 (8X8) plugs. Straight wired to T568B ATT-258A standards. 100% tested wire sequence & continuity. Verified to EIA/TIA Cat. 5E standards. Plugs feature 50 micro inch gold plated contacts. Conforms to FCCrequirements

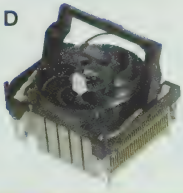
STOCK #	DESCRIPTION	WT.	1EA	10+EA
16934-TT	3ft. Yellow Cat-5e Cable	.05	$0.69	$0.59
16462-TT	7ft. Gray Cat-5e Cable	.1	$1.25	$0.99
17121-TT	14ft. Blue Cat-5e Cable	.1	$1.99	$1.69
16944-TT	25ft. Blue Cat-5e Cable	.4	$2.99	$2.69

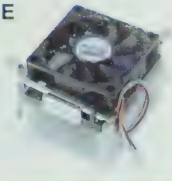
HEATSINKS

A 

B 

C 

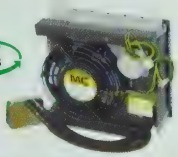
D 

E 

STOCK #	FIG.	FINISH	DISCRIPTION	DIM: L: X W: X H:	MANU./PART NUMBER	WT.	1EA	5+EA
17045-HK	A	Natural	AMDDuron/Athlon XP2100/MP1200 Socket A Assembly	3-1/8" X 2-1/2" X 2-1/2"	AVC/112C80FBL03	.63	$4.95	$3.95/25
			Aluminum sink with Thermal pad. Attached 60mm sq. 12VDC/.1A 14+CFM fan with stall detection, 5" leads					
18710-HK	B	Natural	H/P motherboard INTEL CPU	3-1/2" X 3-1/2" X 2-7/8"	AVC-hp/617755-001	.78	$6.95	----
			Fan offset from mtg. screws. Rounded Aluminum sink with round Thermal pad. Attached 80mm sq. 12VDC CFM fan with stall detection, 4" leads					
18709-HK	C	Natural	H/P motherboard INTEL CPU	4" X 3-1/4" X 2-1/2"	AVC-hp/583417-001	.56	$6.95	----
			Fan aligned to Mtg. screws. Rect. Aluminum sink with round Thermal pad. Attached 80mm sq. 12VDC CFM fan with stall detection, 4" leads					
16801-HK	D	Natural	IntelP4 Prescott Socket 478 Heatsink Assembly	3-5/8" X 2-11/16" X 1-5/16"	Delta	1	$6.95	$5.95(10+)
			Aluminum sink/massive copper base, with 80mm Rnd. 12VDC fan with stall detection, 5" leads (for Sony VAIO & PCs with Socket 478 MotherBoard					
19013-HK	E	Natural	IntelP4-3.4 Socket 478 Heatsink Assembly	3-3/8" X 2-7/8" X 2-3/4"	AVC	1.2	$8.95	----
			Aluminum sink/thermal pad, 70mm Sq.. 12VDC/14CFM fan with stall detection, 5" leads (Best Guess in for H/P)					

CPU LIQUID COOLING SYSTEM

360° WEB



MFG: SANYO DENKI
P/N: 109-LC1-003
Input: 12VDC X 2
Fan: .25A Max.
Pump: .12A
Thermal Resistance: .22K/W HI/ .255K/W lo speed
(for Ref: Std. Heatsink/Fan: ~.4K/W)
Self contained, Sealed Air/liquid heat exchange CPU Cooler for Socket LGA775 P.C. motherboards provides 30%+ improvement over standard CPU fan/heatsink. System consists of Fan/Radiator/Pump assembly with Flexable plastic piping to nickel plated Copper Plate, includes metal CPU clamp.
Variable speed fan Rated 2400RPM Max @ 42db noise above 35deg. "C", 1300RPM Min. @28db noise below 25 deg. "C".
Radiator: Aluminum multi Fin & tube. 6-1/4" X 6-1/2" X 1/2" O/A: 6-7/8" X 7-3/4" X 3"
Cold Plate: 2-1/8" X 1-3/4"
Tubing: Fluorpolymer 8" long.
NOTE: DESIGNED TO FIT A SPECIAL TOWER CASE MAY REQUIRE MODIFICATIONS TO YOUR CASE
No Case hardware supplied

WT: 2.9

STOCK #	DESC.	1EA
17515-HK	CPU Cooler Assembly	$39.95

24VDC IMPULSE COUNTER

TAMURA E630 6 Digit, non-resettable impulse counter rated: 24VDC, 2W, 10CPS. Plastic case Base mounts 2in. leads to 4 Pin Connector. All are set to "0"
W: 1-3/16" **H:** 39/64" **D:** 2" **WT:** .16

STOCK #	DESC.	1EA
17949-MI	Tamura 24VDC Counter	$1.95

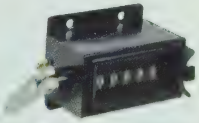
250 PSI GAUGE

2" Dia, 0-250 PSI gauge with right side 1/8" NPT brass nipple. Rec needle, Black legend on white ba ground. Steel case with plastic face.
Dia: 2" **T:** 1" **W:** 2-7/8" O/A **WT:** .18

STOCK #	DESC.	1EA
18755-HD	250PSI Gauge	$4.95

THOUSANDS more Items on www.mpja.com

MECHANICAL IMPULSE COUNTER



5 Digit, resettable impulse counter, 10CPS. max rate.
Metal case with a 1-7/8" long actuating lever, 4 holes in Base for mounting
W: 2-1/4" Body **H:** 1-3/4" **D:** 1-7/8" **WT:** .3

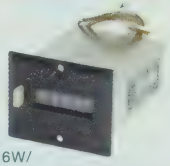
STOCK #	DESC.	1EA
31432-MI	Mechanical Counter	$3.50

24VDC RUNNING TIME METER

ENM T33 series low power, Non-Resetable Time meter. 7digit, crystal contolled impulse counter. Black Face with White & Red numbers, Max 99999.99 hrs. 24VDC Operation, 10mW draw. Snap-in, front mounts in 1.18" X .51 cutout. 11" leads
W: 1-1/4" **H:** 9/16" **D:** 1-7/16" **WT:** .05

STOCK #	DESC.	1EA	5EA
17906-MI	24VDC ENM Time Meter	$14.95	$12.95

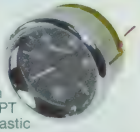
RESETTABLE 24VDC IMPULSE COUNTER



LINE SEIKI P/N MCH5P, Resettable, 5 Digit, impulse counter. Rated 24VDC/2.6W/ 15CPS. Plastic face, metal case front mounts into a 47mm X 26.5mm cutout. 8in. leads.
W: 2" **H:** 1-5/8" **D:** 3" maxO/A **WT:** .4

STOCK #	DESC.	1EA
19239-MI	24VDC Resetable Counter	$9.95

OIL PRESSURE GAUGE



SUNPRO CP8061 0-100PSI lighted Oil pressure gauge. 2-1/2" Dia, with white legend & black face. 1/8" NPT Brass fitting on gauge. Includes plastic tubing & fittings for engine block & Gauge. 12V lamp with 12in. +lead. With mounting bracket.
Dia: 2-5/8" **D:** 2" **WT:** .6

STOCK #	DESC.	1EA
19301-HD	Oil Pressure Gauge	$14.95

24VDC IMPULSE COUNTER

HANG ZHOU P/N DJ625, non-resettable, 6 Digit, impulse counter. Rated 24VDC/.6W/10CPS. Plastic case snap-in mounts into a 1" X 17/32" cutout. 12in. leads. All have a couple of test counts on them
W: 1-1/16" **H:** 7/8" **D:** 1-3/8" **WT:** .04

STOCK #	DESC.	1EA	25+EA
16521-MI	24VDC Counter	$1.95	$1.50

24VDC IMPULSE COUNTER

TAMURA ot 6 Digit, non-resettable 24VDC impulse counter. Plastic case snap-in mounts into a 1" X 17/32" cutout. 4in. leads. All are set around 999XXX to allow testing of equipment once installed.
W: 1-1/16" **H:** 7/8" **D:** 1-3/8" **WT:** .04

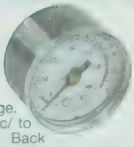
STOCK #	DESC.	1EA	5+EA
15551-MI	Tamura Counter	$3.95	$3.50

12-40VDC RUNNING TIME METER

Low power, Non-Resetable Run Time meter. 5digit, crystal contolled time meter. Black Face with White numbers, Max 9999.9 hrs. 12-40VDC Operation, 2mA @ 12V draw. Snap-in, front mounts in 1-7/16" X 15/16" cutout. .250" quick connect terminals.
W: 1-9/64" **H:** 1-1/4" **D:** 2-7/16" **WT:** .14

STOCK #	DESC.	1EA
18897-MI	12VDC Run Time Meter	$10.95

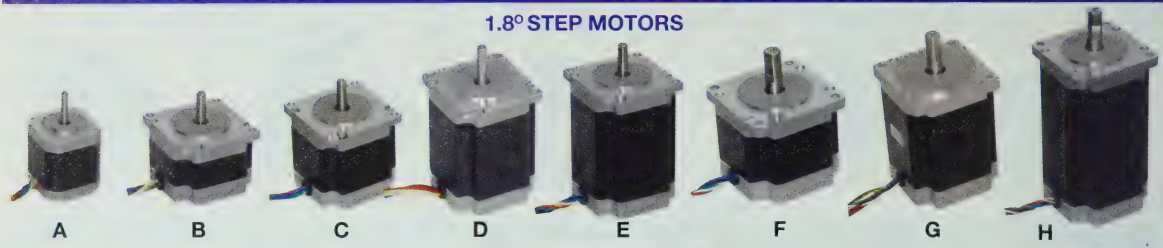
VACUUM & PSI GAUGE



1-5/8" Dia. Vac & Pressure gauge. Dual scale reads from 30in/Hg Vac/ to 300PS and -1to 20 atmospheres. Back side 1/8" NPT brass nipple. Black,Blue & Red legend on white background. Steel case with plastic face
Dia: 1-5/8" **D:** 1-5/8" O/A **WT:** .12

STOCK #	DESC.	1EA
19298-HD	300PSI Gauge	$2.95

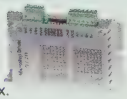
1.8° STEP MOTORS



4 corner mtg. holes, Steel Shaft, 24" leads.

STOCK #	FIG.	NEMA	VOLTS	AMPS	IND.	OHMS	HOLD TORQ.	P/ NUMBER	TYPE	DIM. (BODY) L X SQ.	SHAFT	WT.	1EA
18735-MS	A	17	5.2VDC	.5	7mH	10.5	1.5Kg/cm	42BYGH3404	4 Phase/Uni-Polar6 lead	1-3/8" x 1-5/8"	5 X 17mm	.5	$9.95
18733-MS	A	17	12VDC	.31	18.5mH	38	1.6Kg/cm	42BYGH007	4 Phase/Uni-Polar6 lead	1-3/8" x 1-5/8"	5 X 17mm/flat	.5	$9.95
17453-MS	A	17	5.2VDC	1	5.2mH	5.2	3.2Kg/cm	42BYGH4806	4 Phase/Uni-Polar6 lead	2" x 1-5/8"	5 X 22mm	.84	$15.95
18734-MS	A	17	12VDC	.4	25mH	30	3.2Kg/cm	42BYGH404	4 Phase/Uni-Polar6 lead	1-7/8" x 1-5/8"	5 X 22mm	.76	$10.95
18686-MS	B	23	2.8VDC	2	1.2mH	1.4	4.2Kg/cm	57BYGH008	4 Phase/Uni-Polar6 lead	1-5/8" x 2-3/16"	6.35 X19mm	1	$17.95
17454-MS	B	23	24VDC	.34	90mH	71	4.4Kg/cm	57BYGH006	4 Phase/Uni-Polar6 lead	1-5/8" x 2-3/16"	6.35 X19mm	1	$17.95
17455-MS	C	23	6.2VDC	1	10mH	6.2	9Kg/cm	57BYGH213	4 Phase/Uni-Polar6 lead	2-3/8" x 2-3/16"	6.35 X19mm	1.6	$14.95
18728-MS	C1	23	6.2VDC	1	10mH	6.2	9Kg/cm	57BYGH213-25	4 Phase/Uni-Polar6 lead	2-3/8" x 2-3/16"	6.35 X20mm/Dual	1.6	$15.95
18189-MS	D	23	5.7VDC	2.3	5.3mH	2.5	16Kg/cm	57BYGH303	4 Phase/Uni-Polar6 lead	3" x 2-3/16"	6.35 X25mm	2.3	$23.95
18729-MS	D1	23	5.7VDC	2.3	5.3mH	2.5	16Kg/cm	57BYGH303-50	4 Phase/Uni-Polar6 lead	3" x 2-3/16"	6.35 X24mm/Dual	2.4	$22.95
18687-MS	D	23	4.5VDC	2.5	3mH	1.8	18Kg/cm	57BYGH317	4 Phase/Uni-Polar6 lead	3" x 2-3/16"	6.35 X25mm	3.4	$24.95
17456-MS	E	23	3.6VDC	3	2.4mH	1.2	21Kg/cm	57BYGH405A	4 Phase/Uni-Polar6 lead	3-1/4" x 2-3/16"	6.35 X19mm	2.6	$34.95
17458-MS	F	34	3.0VDC	3	4.05mH	1	23Kg/cm	85BYGH450A-04	4 Phase/Uni-Polar6 lead	3" x 3-3/8"	13 X35mm	4.7	$54.95
18190-MS	G	34	6.0VDC	2	12mH	3	48Kg/cm	85BYGH450B-03	4 Phase/Uni-Polar8 lead	4-17/32" x 3-3/8"	13 X35mm	8.1	$68.00
17457-MS	H	34	7.8VDC	2	24mH	3.9	63Kg/cm	85BYGH450C-01	4 Phase/Uni-Polar8 lead	6" x 3-3/8"	13 X35mm	11	$79.95

MINI STEP MOTOR DRIVER



P/N: CW-215
INPUT: 12-36VDC
OUTPUT: Selectable up to 1.5A max.
STEP ANGLE: 1.8 deg (200steps/Rev.)
Microstep: 1/2-1/4-1/8-1/16-1/32-1/64
Full bridge driver for hybrid stepmotors.
Switch Selectable output current.
Over temp Protected.
Opto isolated Step pulse input (Clock input +5V Level).
Opto Isolated Direction input (+5V Level)
Opto Isolated Reset input (+5V Level)
Terminal strips in/out.
L: 3-15/16" **W:** 2-5/16" **T:** 3/4" **WT:** .5

STOCK #	DESC.	1EA
18187-MS	Mini Stepper Driver	$54.90

3A STEP MOTOR DRIVER

P/N: CW230
INPUT: 24-36VDC
OUTPUT: Selectable up to 3A max.
STEP ANGLE: 1.8 deg (200steps/Rev.)
Microstep: 1/2-1/4-1/8-1/16-1/32-1/64
Full bridge driver for hybrid stepmotors.
Switch Selectable output current.
Over temp & Output miswire Protected.
Opto isolated Step pulse input (Clock input +5V Level).
Opto Isolated Direction input (+5V Level)
Opto Isolated Reset input (+5V Level)
Terminal strips in/out.
L: 4-5/8" **W:** 2-3/4" **H:** 1-3/8" **WT:** .7

STOCK #	DESC.	1EA
17451-MS	CW230 Stepmotor Driver	$48.50

5A STEP MOTOR DRIVER

P/N: CW250
INPUT: 20-60VDC
OUTPUT: Selectable up to 5A max.
STEP ANGLE: 1.8 deg (200steps/Rev.)
Microstep: 1/8: 1600 steps/Rev.
Full bridge driver for hybrid stepmotors.
Switch Selectable output current.
Over temp & Output miswire Protected.
Opto isolated Step pulse input (Clock input +5V Level).
Opto Isolated Direction input (+5V Level)
Terminal strips in/out.
L: 5-3/4" **W:** 3-3/4" **H:** 1-3/4" **WT:** 1.5

STOCK #	DESC.	1EA
17452-MS	CW250 Stepmotor Driver	$49.95

6A STEP MOTOR DRIVER

P/N: CW260C
INPUT: 24-70VDC
OUTPUT: Selectable up to 6A max.
STEP ANGLE: 1.8 deg (200steps/Rev.)
Microstep: 1/2-1/4-1/8-1/16-1/32-1/64-1/128-1/256
1/5-1/10-1/25-1/50-1/125-1/250
Full bridge driver for hybrid stepmotors.
Switch Selectable output current.
Over temp & Output miswire Protected.
Opto isolated Step pulse input (Clock input +5V Level).
Opto Isolated Direction input (+5V Level)
Opto Isolated Reset input (+5V Level)
Terminal strips in/out.
L: 5-13/16" **W:** 3-13/16" **T:** 1-3/16" **WT:** 1.2

STOCK #	DESC.	1EA
18188-MS	CW260C Step Motor Driver	$96.00

AC POWERED DRIVER

P/N: CW1108
INPUT: 110VAC, 60hz
OUTPUT: Selectable from .5 to 8A max.
STEP ANGLE: 1.8 deg (200steps/Rev.)
Microstep: 1;1/2;1/4;1/5,1/6;1/8;1/10;1/16;1/18;
1/20;1/32;1/40;1/50;1/64;1/1/128;1/256
Internal micro controller chip, Full bridge driver for hybrid stepmotors. Switch Selectable output current.
Opto isolated Step pulse input (Clock input +5V Level).
Opto Isolated Direction & Enable inputs (+5V Level)
Terminal strips in/out. Internal cooling Fan.
L: 7-11/16" **W:** 3-1/4" **H:** 1-3/4" **WT:** 3.5

STOCK #	DESC.	1EA
18727-MS	CW1180 AC Stepmotor Drive	$169.95

3A STEP MOTOR DRIVER

INPUT: 10-35VDC (24 Nominal)
OUTPUT: Selectable up to 3A max.
STEP: Full & 1/2-1/8-1/16 Microstep
Full bridge driver for 4 or 6 wire hybrid stepmotors.
Automatic drop to Hold current with no step Input.
Switch Selectable output current. .3A-3A
Over temperature & current Protected.
Under Voltage Shutdown
Opto isolated Step, Direction & Enable Inputs. (+5V Level)
Terminal strips in/out.
Power and Run LEDs
L: 3" (76cm) **W:** 2" (51cm) **H:** 1-1/2" (38cm) **WT:** .2

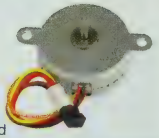
STOCK #	DESC.	1EA
31306-MS	Single Axis Stepmotor Driver	$17.95

1.8 DEG. STEP MOTOR

MFG: SHINANO
P/N: STH-39G120
NEMA: 16
COIL: 1.2 ohm
TYPE: 2 Phase Uni-Polar 6 lead
USED, 1.8 Degree step angle. 5mm dia. X 9mm serrated steel shaft. 4 M3X 0.5 metric mounting holes. 4" leads.
SQ.: 1-1/2" **L:** 1-1/4" **WT:** .36

STOCK #	DESC.	1EA
30238-MS	Shinano Step Motor	$3.95

7.5DEG. STEP MOTOR



MFG: NPM
P/N: PFC35T-48134
COIL: 3V/2.2ohm
TYPE: 2 Phase Uni-Polar 6 lead
USED, 7.5 Degree step angle. 3mm dia. X 10mm serrated steel shaft. 2 mounting ears. **3" leads.**
Dia: 35mm(Body) 50 O/A **T:** 17mm **WT:** .14

STOCK #	DESC.	1EA
30231-MS	7.5 Deg. Nippon Step Motor	$2.95

1.8 DEG. STEP MOTOR

MFG: DANAHER
P/N: CTP21NLF56NAA00
NEMA: 23
COIL: 5.6A/ 1.1mH/.31ohm
TYPE: 2 Phase Bi-Polar 4 lead
1.8 Degree step angle. 160oz/in torque, 8oz/in Dedent torque. 1/4in. dia. X 3/4in. steel shaft. 4 mounting holes. 10" leads.
SQ.: 2-1/4" **L:** 2-1/8" **WT:** .1.4

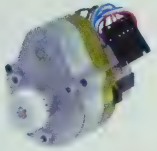
STOCK #	DESC.	1EA
30338-MS	Danaher 1.8 deg. Step Motor	$14.95

3V 1.8DEG. STEP MOTOR

MFG: SHINANO KENSHI
P/N: STP42D4009
NEMA: 17
COIL: 3V/1.6 ohm
TYPE: 2 Phase Uni-Polar 6 lead
STEP ANGLE: 1.8 deg 120step/rev
5mm dia. X 24mm steel shaft with metal 20 tooth X 11/16" dia. gear & 22 tooth X 9/16" dia. cog belt pully. 4 corner m3x0.5 mounting holes. 5" leads.
L: 1-5/8" (Body) **SQ:** 1-9/16" **WT:** .64

STOCK #	DESC.	1EA
16231-MS	1.8Deg. Step Motor	$7.95

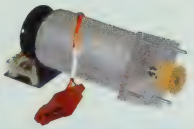
GEARHEAD STEP MOTOR



MFG: CROUZET
P/N: 82919004
COIL: 56VDC/648ohm/5W
TYPE: 2 Phase Uni-Polar 4 lead
7.5 Degree stepmotor driving a 1440/1 gearhead, 6mm dia. X 10mm flatted steel shaft. Removable 7/8" dia, 20 tooth plastic gear. 3 M3 mounting holes. 4" leads.
L: 2-9/16" (Body) **W:** 2-1/8" **H:** 2-1/2" **WT:** .5

STOCK #	DESC.	1EA
18891-MS	Crouzet Gearhead Stepmotor	$17.95

24V 15DEG. STEPMOTOR



MFG: SLO-SYN
P/N: SM-024-0065-RX
COIL: 24V/9-11ohms/2.4A
TYPE: Uni-Polar 5 lead
STEP ANGLE: 15 deg
Used motor with a 1/4" dia. X 1-3/16" steel front shaft with a removable plastic COG Belt pully. 1/4"dia. X 3/4" rear shaft with a Photo interrupter/Tach assembly.
W: 5-1/2" **D:** 5-3/4" **H:** 3-1/2" **WT:** 3.5

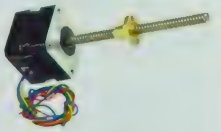
STOCK #	DESC.	1EA
17758-MS	Slo-Syn Step Motor	$9.95

3V/1.8 Deg.STEP MOTOR

MFG: JAPAN SERVO
P/N: KH56KM2R003
NEMA: 23
COIL: 3VDC/.75ohms
TYPE: 2 Phase Bi-Polar 6 lead
STEP ANGLE: 1.8 deg
Custom motor with a Front 6mm dia. X 27mm steel shaft with a pressfit 9mmdia.16 tooth, sintered steel cog belt gear. Stepped Rear shaft 17mm long with a flatted shaft end section is .25" long X .195" dia, 2nd step is .25" long X .238"dia. Ball bearings, 10" leads, 4 corner mounting holes.
L: 2-1/8"(Body) **SQ:** 2-3/16" **WT:** 1.5

STOCK #	DESC.	1EA
18854-MS	3V Japan Servo Motor	$14.95

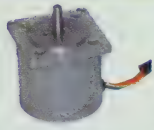
LINEAR STEP MOTOR



P/N: 42HD0403-100L
NEMA: 17
COIL: 1.5A/1.3 ohm
TYPE: 2 Phase 4 Lead Bi-Polar or H Drive
1.8 Degree stepper motor with a 8mm Dia./.2Pitch X 100mm steel 4 Start Helical leadscrew with brass traveler. 10mm/turn or .05mm/step.
4 corner M3X 0.5 metric mounting holes. 13" leads.
SQ.: 1-5/8" **L:** 1-3/8" (Body) **WT:** .6

STOCK #	DESC.	1EA
31564-MS	Linear Step Motor	$29.95

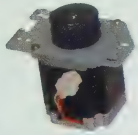
1.8 DEG. STEP MOTOR



MFG: SANYO DENKI
P/N: 103-771-18
COIL : 24V/.18A
TYPE: Uni-Polar 5 lead
STEP ANGLE: 1.8 deg
Specifications/Features: Used motor with a 1/4" dia. X 3/4" steel shaft. 50oz/in Holding torque, 30oz/in. running depending on drive. 4 corner mounting holes . 7"
L: 2" (Body) **W:** 2-3/16"sq **WT:** 1.2

STOCK #	DESC.	1EA	10+EA
15837-MS	24VDC Step Motor	$8.95	$7.95

3V/ 1.8Deg. STEP MOTOR



MFG: SHINANO KENSHI
P/N: STP-58D4002-03
COIL: 3VDC/.42ohms
TYPE: 2 Phase Bi-Polar 4 lead
STEP ANGLE: 1.8 deg
7mm dia. X 18mm steel shaft with a pressfit 1-1/2" dia. 36 tooth, sintered steel cog belt gear. Ball bearings, 3" leads, 4 corner mounting holes threaded M4.5, Removable steel mtg. bracket
L: 2-5/8"(Body) **SQ:** 2-3/16" **WT:** 2.2

STOCK #	DESC.	1EA	10+EA
17153-MS	3V SKC Step Motor	$14.95	$12.95

1.8 Deg. STEP MOTOR

MFG: SOURCE ENG.
P/N: 17H150H-014L
NEMA: 17
COIL: 5.6V/.85A/6.3ohm/7mH
TYPE: 2 Phase Uni-Polar 4 lead
STEP ANGLE: 1.8 deg
Custom motor with a 5mm dia. X 7/8" steel shaft. Ball bearings, 13" leads and four M3-.5 mm corner mounting holes.
L: 1-9/16"(Body) **SQ:** 1-5/8" **WT:** .56

STOCK #	DESC.	1EA
19286-MS	Source NEMA17 Step Motor	$9.50

24V/3.6 DEG. STEPMOTOR

MFG: HOWARD
P/N: 1-19-4201
COIL : 24V/.16A/140ohm/68mH
TYPE: 2 Phase Bi-Polar 5 lead
STEP ANGLE: 3.6 deg
600gm/cm holding torque. 3/16" dia. X 7/16" shaft with a smooth 11/16" dia. aluminum hub. 2 corner mounting studs. 7" leads.
L: 1-1/2" (Body) **W:** 1-5/8"sq **WT:** .6

STOCK #	DESC.	1EA
4318-MS	3.6deg. 24V Stepmotor	$4.95

3.84V STEPMOTOR

MFG: SHINANO KENSHI
P/N: STP-57D211
COIL: 3.84VDC/4.7 ohms/.8A
TYPE: 2 Phase Uni-Polar 5 lead
STEP ANGLE: 1.8 deg (Motor)
6.5mm dia. X 18mm steel shaft with a 3/4" dia., 16 tooth, plastic cog belt gear attached by a steel roll pin. Ball bearings, 3" leads, 4 corner mounting holes, Removable anti vibration rubber/steel mtg. bracket. 4" leads.
L: 2" Body **Sq.:** 2-3/16" **WT:** 1.5

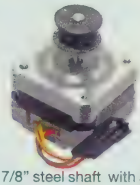
STOCK #	DESC.	1EA
17607-MS	3.84VDC Stepmotor	$9.95

1.8 DEG. STEP MOTOR

MFG: ASTROSYN
P/N: 23LM-C712-P4
NEMA: 23
COIL : 1.4ohm/2.3mH
TYPE: Bi-Polar 4 lead
STEP ANGLE: 1.8 deg
Specifications/Features:
Custom motor with a 1/4" dia. X 9/16" steel shaft with a pressfit 15/32"dia.13 tooth, sintered steel cog belt pully. 4 corner mounting holes. 13" leads.
L: 2-3/4" (Body) **W:** 2-3/16"sq **WT:** 1.7

STOCK #	DESC.	1EA
18956-MS	Astrosyn Step Motor	$12.95

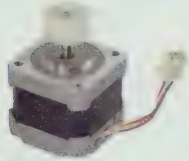
1.8 Deg. STEP MOTOR



MFG: SHINANO KENSHI
P/N: STP-42D0003
NEMA: 17
COIL: 3.8ohm/4.8mH
TYPE: 2 Phase Uni-Polar 4 lead
STEP ANGLE: 1.8 deg
Custom motor with a 5mm dia. X 7/8" steel shaft with a 13/16" dia., 25 tooth, press fit metal cog belt gear. Ball bearings, 3" leads and four M3-.5 mm corner mounting holes.
L: 1-3/16"(Body) **SQ:** 1-5/8" **WT:** .4

STOCK #	DESC.	1EA
18958-MS	Shinano NEMA17 Step Motor	$8.95

6V/ 1.8Deg. STEP MOTOR/ GEARS



MFG: SHINANO KENSHI
P/N: STP-42D217
NEMA: 17
COIL: 6VDC/.76A/7.9ohms/10mH
TYPE: 2 Phase Bipolar, 6 lead
STEP ANGLE: 1.8 deg
5mm (Dia.) X 20mm (3/4") steel shaft with pinned plastic 21 tooth .75"id. cog belt pulley. Four M3-.5 mm corner mounting holes. 4" leads.
L: 1-9/16" (Body) **SQ:** 1-5/8" **WT:** .6

STOCK #	DESC.	1EA
18957-MS	1.8Deg. Kenshi Stepmotor	$9.95

1.8 Deg.STEP MOTOR

MFG: MINEBEA
P/N: 23LM-K202-33V
NEMA: 23
COIL: 6VDC/3.5ohms/1.3A
TYPE: 2 Phase Uni-Polar 4 lead
STEP ANGLE: 1.8 deg
Custom motor with a flatted .25" dia. X 3/4" steel shaft with a 7/8 dia., 28 tooth, plastic cog belt gear attached by a set screw. Ball bearings, 6" leads, 4 corner mounting holes, removable steel mtg. bracket with shock mounts.
L: 1-5/8"(Body) **SQ:** 2-3/16" **WT:** 1.1

STOCK #	DESC.	1EA
18857-MS	6V Minebea Step Motor	$9.95

24V/3.6 DEG. STEPMOTOR

MFG: HOWARD
P/N: 1-19-4201
COIL : 24V/.16A/140ohm/68mH
TYPE: 2 Phase Bi-Polar 5 lead
STEP ANGLE: 3.6 deg
600gm/cm holding torque. 3/16" dia. X 7/16" shaft. 2 corner mounting studs. 7" leads.
L: 1-1/2" (Body) **W:** 1-5/8"sq **WT:** .52

STOCK #	DESC.	1EA
18885-MS	3.6deg. 24V Stepmotor	$6.95

MOTOR/GEAR ASSEMBLY

360° VIEW @MPJA.COM

MFG: SHINANO KENSHI
P/N: STP-57D505
COIL: 5.3VDC/1A
TYPE: 2 Phase Uni-Polar 5 lead
STEP ANGLE:1.8 deg (Motor)
Assembly#: 127K18074
Step motor & gear assembly for copy machine. Motor has 7mm steel shaft with a pressed on aluminum spur gear. Removable gear unit contains 5 various plastic gears, 2 have mechanical unidirectional clutch. 5in.
Motor: L: 3" **Sq.:** 2-1/4" **WT:** 2.3
Assembly: L: 4-3/4" **W:** 5-1/4" **H:** 2-7/8" **WT:** 2.9

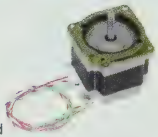
STOCK #	DESC.	1EA
17461-MS	Stepmotor Assembly	$14.95

1.8 Deg. STEP MOTOR

MFG: AIRPAX
P/N: 4SQ-120BA34SL
NEMA: 17
COIL: 12V/.16A/75 ohm/67mH
TYPE: 2 Phase Bi-Polar 6 lead
STEP ANGLE:1.8 deg
Motor with a 5mm dia. X 7/8" steel shaft. Ball bearings, 5" leads and 2 M3-.5 mm corner mounting studs.
L: 1-3/8"(Body) **SQ:** 1-5/8" **WT:** .44

STOCK #	DESC.	1EA
19447-MS	12V Airpax NEMA17 Step Motor	$9.50

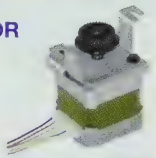
1.8 Deg. STEP MOTOR



MFG: JAPAN SERVO
P/N: KH56JM2-U069
NEMA: 23
COIL: 2V/2A/1ohm
TYPE: 2 Phase Uni-Polar 4 lead
STEP ANGLE:1.8 deg
Custom motor with a flatted 6.36mm dia. X 7/8" steel shaft. Ball bearings, Removable vibration pad & steel bracket. 6Pin Connector
L: 1-3/8"(Body) **SQ:** 2-3/16" **WT:** 1.3

STOCK #	DESC.	1EA
31037-MS	Japan Servo Step2.0V Motor	$7.95

1.8 Deg. STEP MOTOR



MFG: JAPAN SERVO
P/N: KH42JM2-070
NEMA: 17
COIL:3.4V/3.2ohms/2.5uH
TYPE: 2 Phase Bi-Polar 6 lead
STEP ANGLE:1.8 deg
Custom motor with a flatted 5mm dia. X 7/8" steel shaft with a 7/8" dia., 36 tooth, Removable plastic cog belt gear. Ball bearings, 7" leads, 4 M3-0.5mm threaded corner mounting holes. Removable vibration pad & steel bracket
L: 1-9/16"(Body) **SQ:** 1-5/8" **WT:** .7

STOCK #	DESC.	1EA
18867-MS	Japan Servo Step Motor	$7.95

1.8 Deg. STEP MOTOR

MFG: MINEBEA
P/N: 17PM-K119-06V
NEMA: 17
COIL: 10 ohm/12mH
TYPE: 2 Phase Uni-Polar 4 lead
STEP ANGLE:1.8 deg
Custom motor with a 4.5mm dia. X 9mm serrated steel shaft. Ball bearings, 9" leads and four M3-.5 mm corner mounting holes.
Leads: Blue= "B", Orange="-B"/ Red="A", Yellow="-A"
L: 1-5/8"(Body) **SQ:** 1-5/8" **WT:** .55

STOCK #	DESC.	1EA
19533-MS	Minebea NEMA17 Step Motor	$9.95

6.5V/1.8 Deg. STEP MOTOR

MFG: SHINANO KENSHI
P/N: STH-54D500-03Y
NEMA: 23
COIL:6.5VDC/5.1ohms/1.3A
TYPE: 2 Phase Bi-Polar 5 lead
STEP ANGLE:1.8 deg
Custom motor with a flatted 7.1mm dia. X 15mm steel shaft with with a 1-5/8 dia., 30 tooth, plastic cog belt gear attached by a steel roll pin. 1-1/2" dia. X 5/16" rubber pad attached to shaft behind pully. Ball bearings, 6" leads, 4 corner mounting holes.
L: 3"(Body) **SQ:** 2-3/16" **WT:** 2.2

STOCK #	DESC.	1EA
18855-MS	6.5V Kenshi Step Motor	$12.95

7.5 DEG. STEP MOTOR

MFG: AIRPAX
P/N: M82201-P2SB
COIL:12VDC/64ohm
TYPE: 2 Phase Uni-Polar 6 lead
7.5 Degree stepmotor with Bronze Bearings, 2mm dia. X 10mm steel shaft, 2 mounting holes. Holding Torq: 3.9 oz/In 7" leads. Mtg. Ctrs.: 1.65"
Dia: 1.97" (Body) **D:** 7/8 **WT:** .18

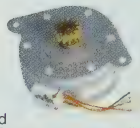
STOCK #	DESC.	1EA
30031-MS	Airpax 7.5 deg. 12V Motor	$6.95

24V 7.5 DEG. STEP MOTOR

MFG: NPM
P/N: PFC55-48B1
COIL:24V/14ohm
TYPE: 2 Phase Uni-Polar 6 lead
7.5 Degree step angle. 2.2mm dia. X 15mm steel shaft with a 8 tooth 1/4" dia. X .187" long brass spur gear. 2 mounting holes. 10" leads. Includes a matching pitch steel 32 tooth gear for a 7/32" shaft
Dia: 55mm(Body) 76.2 O/A **D:** 25mm (1") **WT:** .62

STOCK #	DESC.	1EA
18086-MS	24V Nippon Step Motor	$4.95

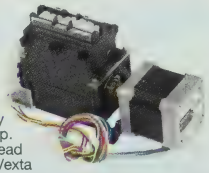
24V 7.5 DEG. STEP MOTOR



MFG: NMB
P/N: PM55L-048
COIL: 24V/30 Ohm
TYPE: 2 Phase Uni-Polar 5 lead
7.5 Degree step angle. 500PPS, Max rate. 4mm dia. X 10mm steel shaft with 11 tooth, 14mm dia X 7mm , brass gear. 2 mounting ears. 2" leads.
W: 3"(Max Body) **T:** 1" **WT:** .55

STOCK #	DESC.	1EA
18368-MS	24V NMB PM55 Step Motor	$3.95

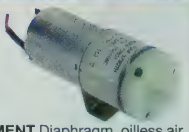
STEP MOTOR ASSEMB.



USED remains of a fancy linear Peristaltic pump. Motor is a NEMA 17, 6lead unipolar 6V/.8A/1.8Deg. Vexta PX245 series. Plastic Pump body is a: 12"foot" undulating unit missing the Hose & pump Cap assembly. DualSlot Photo sensor on rear pump shaft,
L: 5-7/8" O/A **W:** 7/8"O/A **H:** 3-3/8" **WT:** 1.4

STOCK #	DESC.	1EA
19412-Mi	Step motor/Pump Asmb.	$17.95

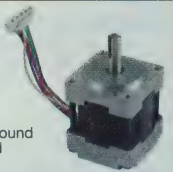
MINI PNEUMATIC PUMP



MFG: KOGE
P/N: KPM27H
Power: 12VDC nom@.3A
Ports: 0.19" hose Bib
REMOVED FROM EQUIPMENT Diaphragm, oilless air pump rated 2.0l/min. no load. Max pressure: 350mmHg. Plastic pump body. For use in coffee units, lab equipment, blood pressure monitors, sampling inst. Single hole stainless mounting bracket. 1/2in. leads.
L: 3" O/A **W:** 1-1/2" **H:** 1-1/8" **WT:** .14

STOCK #	DESC.	1EA
18831-MI	Koge Mini Air Pump	$4.95

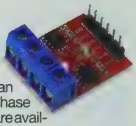
.72 Deg. STEP MOTOR



MFG: VEXTA
P/N: 14PM-M260-T22VS
NEMA: 11
COIL: .75A/1ohm Pentagon wound
TYPE: 5 Phase Bi-Polar 5 lead
STEP ANGLE: .72 deg
USED, Custom motor with a 5mm dia. X 9/16" slotted steel shaft. Ball bearings, 2in. leads with 5 pin Molex connector. SORRY NO MATING CONNECTOR. Four M2-.5 mm corner mounting holes.
L: 1-1/4"(Body) **SQ:** 1-1/6" **WT:** .2

STOCK #	DESC.	1EA
19379-MS	VEXTA NEMA11 Step Motor	$14.95

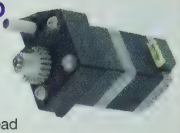
H-BRIDGE STEPMOTOR DRIVER



Dual Driver for Microcontrollers
Designed around the L9110S IC, can drive 2 DC motors or 1 four wire 2 phase stepper. TTL logic control input. Freeware available through www. arduino.cc.en and others.
Power: 2.5-12VDC
Output: .8A cont. 1.5A Peak
Input: TTL logic levels
Connections: 6 Pin (.1") Input header for connection to power & uController
Output: Terminal strip for A A/BB motor
LED for Power.
WT: .01

STOCK #	DESC.	1EA
31162-MP	Dual H Motor Driver	$3.95

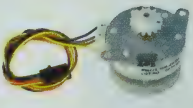
.1DEG. GEARHEAD STEP MOTOR



MFG: ORIENTAL MOTOR
P/N: PK223PA-SG18
NEMA: 11
COIL: 2.66V/2.8 ohm
TYPE: 2 Phase Uni-Polar 6 lead
STEP ANGLE: .1deg/Step
USED VEXTA Motor, 5mm dia. X 16mm steel shaft with removable aluminum 20 tooth11/16" dia. gear. 4 corner m2.5x8mm mounting holes. **Sorry NO Mating 6 pin molex connector(51065-0600 & 50212-8100 Pin)**
L: 2-7/16" (Body) **SQ:** 1-1/16" **WT:** .2

STOCK #	DESC.	1EA
31129-MS	.1Deg. Gearhead Step Motor	$9.95

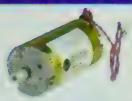
3.75DEG. STEP MOTOR



MFG: NMB
P/N: PM42S-096-XRD9
COIL : 12V/5ohm/5mH
TYPE: Bi-Polar 4 lead
STEP ANGLE: 3.75 deg
Specifications/Features: Custom pancake step motor with a Dual 3mm dia. X 12mm steel shaft with a press fit 16mmdia. 14 tooth, plastic gear on front and a 39mmDia. plastic wheel on back shaft. 2 mounting holes. 8" leads to .1" pitch header socket
L: 9/16" (Body) 1-5/8" O/A **W:** 2-1/4"O/A **WT:** .2

STOCK #	DESC.	1EA
31393-MS	NMB PM42S Step Motor	$1.95

12/24VDC MOTOR



MFG: BUHLER
P/N: 1.13.043.253.05
COIL : 12/24VDC
USED, Rated: 2400 RPM /.14A N.L./ 1.6A Stall@ 12VDC , 5000 RPM/.15A N.L./3A Stall @ 24VDC. 4mm dia. X 12mm steel front shaft with press fit 7.9mm dia. X 11mm aluminum pulley. Front Ball bearing, Rear Sintered Bronze bearing. Two 8-32 threaded mounting holes in front. 10" leads.

L: 3-1/8" (Body) **DIA:** 1-9/16" **WT:** .9

STOCK #	DESC.	1EA
19448-MD	12/24VDC Buhler Motor	$9.95

RECIPROCATING MOTOR ASSEMB.

Removed from new equipment, Motor assembly with a Buehler 1.61.046.520.01 Gearhead motor driving a reciprocating 4-7/8" removable plastic arm. 7/8"Stroke. 115 Strokes/Min @ 6V/ 230 @ 12V/460 @ 24V.12 Slot Photo sensor on rear motor shaft, 2 Slot Photo sensor on Cam plate. Removable steel base plate

L: 9-3/8" O/A **W:** 6"O/A **WT:** 2

STOCK #	DESC.	1EA
17264-MD	Reciprocating Motor Asmb.	$19.95

12VDC ACME GEAR MOTOR

P/N: 5503740 D
COIL: 12VDC
Rated:
88/178/380RPM @ 6/12/24VDC, 1.5A No Load /17A Stall @ 12V.
.187 male quick connect terminals
90Deg. Angled gearhead DC motor with a 4-1/8" long 7/16"-8 Modified class 4G single thread Leadscrew with a custom traveler nut.

L: 5-1/2" (OA) **H:** 2-1/4" (OA) **H:** 6" **WT:** 1.8

STOCK #	DESC.	1EA
19007-MD	12VDC Acme Motor & Nut	$14.95

12V MOTOR/ LEADSCREW

Removed from new equipment, Buehler 1.61.046.531.00 Gearhead motor driving a 4-3/8" long 3/8" X 1.50"-9 Start Right Hand, Fast thread stainless steel lead screw. 3.0" Max travel, 1.5"/Rev. Plastic anti-backlash nut with removable steel bracket. 50 Slot Photo Tach. (5V powered) on rear motor shaft. 3 front mtg. holes threaded M3-.50
Approx. 105RPM/6V/125mA No Load/1.3A Stall
207RPM/12V/140mA No Load/3.2A Stall

L: 9-1/4" **WT:** .72

STOCK #	DESC.	1EA
18758-MD	12VMotor/Leadscrew	$19.95

MINI GEARHEAD MOTOR

3-6VDC reversible small gear head DC motor. Rated 27 RPM @ 3VDC and 56 RPM @ 6VDC 30mA no load, All metal multi stage reduction open gear head for high reliability. Flat side shaft 3mm diameter X 9mm long. Solder terminals, 2 m1.4mm threaded mtg. holes

L: 1-3/8in. **W:** 15/32in. **WT:** .03

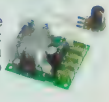
STOCK #	DESC.	1EA
31251-MD	3-6VDC Mini Gearhead Motor	$9.95
31254-HD	10Pcs. m1.4X.3 Mtg. Screws	$0.99

SHAFT COUPLERS

O/D: 18mm
shaft coupling with helical cut aluminum body and dual set screws in each end .
Dia: 18mm **L:** 25mm **WT:** .04

STOCK #	DESC.	1EA
31006-HD	6mm to 6.35mm Coupler	$4.95
31190-HD	6.35mm to 6.35mm Coupler	$4.95

DC SPEED CONTROL



Wide range control uses PWM to vary the speed of DC motors. Remote adjustment pot (included) connects to board by a 12" cable to header pins. Terminal strip for power & Motor connections.
Input: 6/12 or 24VDC
Output: 10A max. 20A Surge
Recommended: 6V/60W, 12V/120W, 24V/200W
Range: 5%-99% of rated motor RPM
Max. Frequency: 21KHz.

L: 2-3/8 **W:** 2" **H:** 1-1/8" O/A **WT:** .15

STOCK #	DESC.	1SET
31566-MD	20A Motor Speed Control	$8.95

DC MOTOR & SPEED CONTROL

MFG: BUEHLER (motor)
P/N: 13.65.054.08
Voltage: 24VDC
Current: .07NL /.9A Stall
Board: 3-1/2" X 1-3/8". 18-24VDC Power with 5V input to control direction. 1250-1650 speed range.
Motor: L: 2-1/4" Dia: 1-1/4" with 2.5mm dia. X 16mm steel shaft with a press fit 1/2" dia. 3 start plastic worm gear. Bronze bearings, 8" motor leads, 13" board leads. 2 mounting holes on motor.
WT: .4

STOCK #	DESC.	1EA
18591-MD	Motor with Speed Control	$7.95

LEAD SCREW MOTOR ASSEMB.

360° VIEW @MPJA.COM

Removed from new equipment, Steel baseplate with a Buehler 1.61.046.531.00 Gearhead motor driving a 4-3/8" long 3/8" X 1.50"-9 Start, Right Hand, Fast thread stainless steel lead screw. 3.0" Max travel, 1.5"/Rev. Plastic anti-backlash nut with removable steel bracket. Approx. 105RPM/6VDC/125mA No Load/1.3A Stall, 50 Slot Photo Tach. (5V powered) on rear motor shaft

L: 9-3/8" O/A **W:** 6"O/A **WT:** 2.3

STOCK #	DESC.	1EA
17265-MD	Lead Screw Motor Assembly	$24.95

12VDC MINI MOTOR

Mabuchi FC-280PT-20150 DC motor with carbon brushes. Rated 8-16VDC, 12V nominal. 11800 RPM, 81mA no load/3.9A Stall @ 12V, Torque @ Stall 335g/cm. 2mm dia. X 10mm serrated shaft. Insertion/Compression terminals

L: 1-3/8" (Body) **Dia:** 1" **WT:** .09

STOCK #	DESC.	1EA
18298-MD	12VDC Mabuchi Motor	$0.99

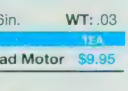
MINI GEARHEAD MOTOR

3-6VDC reversible small gear head motor. Rated 22 RPM @ 3VDC and 44 RPM @ 6VDC 30mA no load, All metal multi stage reduction open gear head for high reliability. Flat side shaft 3mm diameter X 9mm long, 4" wire leads.

L: 1-3/8in. **W:** 1/2in. **H:** 7/16in. **WT:** .03

STOCK #	DESC.	1EA
30454-MD	3-6VDC Mini Gearhead Motor	$9.95

12V 110RPM MOTOR



MFG: COPAL
P/N: LC37G-183
COIL : 12VDC
Removed from New Equipment, Gearhead DC motor rated 110RPM @ 12V/220RPM @ 24V. 6mm dia. X 27mm flatted steel shaft with metal gears. 3 corner mounting holes. 5" leads. 1-7/8" X 1-5/8" mtg. flange.

L: 2" (Body) **Dia:** 1-15/16" (Body) **WT:** .4

STOCK #	DESC.	1EA	10+EA
15530-MD	12VDC 120 RPM Motor	$16.95	$14.95

12V GEARMOTOR

COIL: 12VDC
Gearhead DC motor rated:
6V= 65RPM/.1A no load/.5A Stall
12V=140RPM/.12A no load/1A Stall
15V=178RPM/.13A no load/1.2A Stall
5mm dia. X 10mm flatted steel shaft. 3 metric (M3) threaded mounting holes. 2" leads.

L: 2-7/16" (Body) **Dia:** 1-1/4" **WT:** .24

STOCK #	DESC.	1EA
18746-MD	12VDC Gearhead Motor	$12.95

24V, 19RPM GEARMOTOR

MFG: SOURCE ENG.
COIL: 24VDC
Gearhead DC motor rated:
24V= 25RPM/.06A no load/1.1A Stall
24V=19RPM/.3A @ .94Nm torque (133Oz/In)
6mm dia. X 15mm flatted steel shaft. 4metric (M3) threaded mounting holes. 2" leads.

L: 2-1/2" (Body) **Dia:** 1-15/32" **WT:** .38

STOCK #	DESC.	1EA
19284-MD	24VDC Gearhead Motor	$10.00

24V MOTOR & BELT DRIVE ASSEMB.

USED, Motor assembly with a 24VDC motor driving a COG belt & pulley that in turn drives Worm & gear assembly.
Approx. RPM @ 24VDC NL: Motor: 3380,
Worm gear: 1650, Spur gear: 116.
Plastic gears/steel shafts, Bronze shaft & motor bearings. PC board on motor terminals with noise filters. Steel frame, 5in. wire leads with ferrite filter. Included is Spur gear without a shaft that matches output spur gear.
Motor COG Belt Pully .478":Jack Shaft COG Belt Pully: .975"
Jack Shaft: .309":Output Spur Gear: .608"
loose Spur Gear: 1.527" O/D /.320" I/D

L: 3-1/2" O/A **W:** 3-1/2"O/A **H:** 3-1/2" O/A **WT:** 1.1

STOCK #	DESC.	1EA	10EA
17294-MD	Belt Drive24V Motor	$9.95	$8.95

13V 700 RPM MOTOR

MFG: BUEHLER
P/N: 1.61.046.178.01
COIL : 13VDC
Gearhead DC motor rated 700RPM/ .13A @ 13V No load, 3.3A @ 13V Stall, 500RPM @ 13V with 6oz/in torque load. 5mm dia. X 11mm flatted steel shaft. 3 metric (M3) threaded mounting holes in front plate. 36" leads.

L: 2-1/2" (Body) **Dia:** 1-3/8" **WT:** .4

STOCK #	DESC.	1EA
16392-MD	13V 700RPM Buehler Motor	$9.95

IMMERSION/ DEFROST HEATER

MFG: SPRINGFIELD WIRE
P/N: CUSTOM
POWER: 120VAC/140W
Specifications/Features:
Heater element for heating oil/water and other non-flammables & used in icemakers to free up the cubes. "U" shaped with 8" depth and 2-5/8" base. overall length in approx. 18". .187" quick connect terminals, 1/4" Dia. 316 stainless jacket, rubber sealing grommets at terminals. Requires external temperature control.

H: 9" **W:** 2-3/4" **T:** 7/16" **WT:** .1

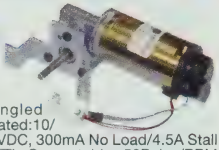
STOCK #	DESC.	1EA	10+EA
18259-MI	Stainless Heater	$5.95	$4.95

4.5V, 140RPM GEARMOTOR

MFG: SOURCE ENG.
COIL: 4.5VDC
Gearhead DC motor rated:
4.5V= 188RPM/.21A no load/3.2A Stall
4.5V=140RPM/1.1A @ .08Nm torque (12Oz/In)
6mm dia. X 15mm flatted steel shaft. 4metric (M3) threaded mounting holes. 4" leads.
L: 2-1/4" (Body) **Dia:** 1-15/32" **WT:** .36

STOCK #	DESC.	1EA
19285-MD	4.5VDC Gearhead Motor	$10.00

21RPM 12VDC MOTOR/TACH



MFG: BUEHLER
P/N: 1.61.031.119.00
COIL : 12VDC/
USED, 90Deg. Angled gearhead DC motor rated:10/21/42RPM @ 6/12/24VDC, 300mA No Load/4.5A Stall @ 12V. Has 5VDC, TTL Compatable, 50Pulse/RPM Tach. mounted on rear. 8mm dia. X 50mm removable/reversable steel shaft held in place by a collet. Removable sheet metal mtg. bracket. 5" Tach leads, 8" motor leads.
L: 8-1/2" (OA) **W:** 4-1/4" **H:** 3" **WT:** 2.9

STOCK #	DESC.	1EA
17249-MD	12V 21 RPM Motor/Encoder	$36.95

36VDC GEARHEAD MOTOR

MFG: MAXON
COIL: 36VDC/60 ohm
Gearhead DC motor rated: 36V/.02A/150RPM no load Start Current: .6A, Max Torque: .1mNm
3mm dia. X 5mm flatted steel shaft. 3 metric (M2) threaded mounting holes. 2" leads.
Dia.: 15/16" (24mm) **L:** 2-1/4" O/A **WT:** .16

STOCK #	DESC.	1EA
31474-MD	36V Maxon Gearhead Motor	$12.95

SERVO ACTUATOR

Servo Motor for Arduino, Raspberry-Pi Robotics
Heavy duty TOWERPRO MG995 mini servo with metal gears for robotics. Rated: Op. Voltage 5-7.2VDC, Stall Torque: 7kg/cm @ 4.8V, 10+kg/cm @ 6V, Speed: 360Deg/Sec (60/.15sec.), Dead Bandwidth: 5us.
12in. cable with Futaba/JR connector.
L: 2-1/8" O/A **W:** 3/4" O/A **H:** 1-1/2" **WT:** .14

STOCK #	DESC.	1EA
31150-MP	Tower Servo Actuator	$7.95

12VDC/6.8RPM GEAR MOTOR

MFG: IGARASHI MOTORS (IGUSA)
P/N: Custom 2732-0300
COIL: 12V
Gear motor rated: 6.8 RPM @ 12VDC, 5mm (3/16") dia. X 10mm (3/8"), flatted steel shaft, bronze bearings. Three M3-.5 threaded mounting holes in front. Solder terminals
L: 2-11/16" (Body) **Dia:** 1-1/4" **WT:** .25

STOCK #	DESC.	1EA	10+EA
15870-MD	12V 6.8RPM Motor	$12.95	$9.95

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19V/82 RPM GEARHEAD MOTOR

MFG: PITTMAN
P/N: GM8712F191
COIL: 19.1VDC/12ohm
USED, Gearhead DC motor rated:
82RPM @ 19.1V, .08A NL,1.5A Stall
51RPM @ 12V, .07A NL, 1A Stall
.187" dia. X .625" steel shaft with a clamp-on 30 tooth steel gear. Removable mtg. plate. Three 4-40 threaded mounting holes. 4" leads.
L: 2-3/4"(Body) **DIA:** 1-3/8" **WT:** .4

STOCK #	DESC.	1EA
18609-MD	82 RPM/19V Motor	$12.95

MICRO SERVO MOTOR

Mini servo for robotics & modeling. Nylon gears for smooth quite operation. Rated: Op. Voltage 3.5-6VDC, Stall Torque: 1.2kg/cm @ 4.8V, 1.6kg/cm @ 6V, Speed: 300Deg./Sec (60/.12sec.), Dead Bandwidth: 5us. Futaba/JR connector on 9in. cable.
L: 23mm **W:** 12mm O/A **T:** 29mm **WT:** .02

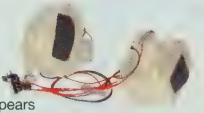
STOCK #	DESC.	1EA
31002-MD	6V Micro Servo Motor	$5.95

24VDC MOTOR

MFG: BUHLER
P/N: 1.13.044.426.53
COIL : 24VDC
Rated: 4200 RPM /.26A N.L./
>6A Stall@ 24VDC, 6mm dia. X 14mm steel shaft with press fit 24.9mm dia. X 9mm aluminum pulley. Front Ball bearing, Rear Sintered Bronze bearing. four M4 threaded mounting holes in front. 10" leads.
L: 4-1/4" (Body) **DIA:** 2" **WT:** 2.1

STOCK #	DESC.	1EA
30463-MD	12/24VDC Buhler Motor	$8.95

DUAL TOY MOTORS



Pair of 3-6VDC motors Mounted in plastic housings with 2-1/2" dia. X 3/4" foam rubber wheels. Appears to use 2 or more "C" or "D" cells. Wiring harness has 2 Battery contacts and a 3 position switch. In one position a diode is connected in series with the motors to reduce the voltage. Motors & housings are almost identical with the exception of one motor has a small belt drive hub.
Each: L: 3-3/8" **W:** 3-1/4" **H:** 2-3/4" **WT:** .6

STOCK #	DESC.	1EA
18310-MD	Dual Toy DC Motors	$1.95

1 RPM TIMER MOTOR

MFG: BRISTOL
COIL: 120VAC 60Hz.
DUTY: Cont.
1RPM Timer motot. Output CCW as viewed from shaft end. .31" dia. 18 tooth brass gear on 3/16" long shaft. 6in. leads.
Dia: 2" **L:** 1-1/2" O/A **WT:** .27

STOCK #	DESC.	1+EA
17843-MA	120VAC 1RPM Motor	$5.95

INST. GEARHEAD MOTOR

3-6VDC reversible small gear head motor. Rated 27 RPM @ 3VDC and 66 RPM @ 6VDC 30mA no load, All metal multi stage reduction enclosed gearhead for high reliability. Flat side shaft 3mm diameter X 9mm long, Solder Terminals
L: 1-5/16in. **Dia:** 15/32in. **WT:** .03

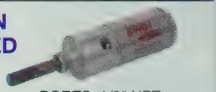
STOCK #	DESC.	1EA
31252-MD	3-6VDC Mini Instrument Motor	$9.95
31255-HD	10Pcs. m2x.4 Mtg. Screws	$0.99

DOUBLE ACTION CYLINDER

MFG: Bimba **PORTS:** 10-32UNF
BORE: 9/16" **STROKE:** 7"
Double action, 303 Stainless steel tube & Rod with aluminum heads. 250 PSI max pressure. 3/16" Dia. steel rod X 1/2" (retracted) with 10-32 UNF-2A thread. Double end or Tail pivot mount 7/16-20 UNF-2A threaded. Sorry, No Mtg. Nuts
L: 10-3/8"O/A **DIA:** 19/16" **WT:** .22

STOCK #	DESC.	1EA
19184-HD	Bimba 9/16" Cylinder	$14.95

SINGLE ACTION SPRING LOADED CYLINDER



MFG: Bimba **PORTS:** 1/8" NPT
BORE: 1-1/2" **STROKE:** 7/8"
USED. Single action, Spring loaded extension, pressure retract. Stainless steel tube, aluminum heads, air cylinder. 200 PSI max pressure. 7/16" Dia.steel rod X 1-3/4" (extended) with 7/16-20 thread. Front mount 3/4"-16 threaded. 12 lbs to compress spring. Sorry, No Mtg. Nuts
L: 4-3/4"Body **DIA:** 1-5/8" **WT:** .8

STOCK #	DESC.	1EA	5+EA
8849-HD	Pneumatic Cylinder	$4.95	$3.95

DOUBLE ACTION CYLINDER

MFG: Bimba **PORTS:** 10-32UNF
BORE: 7/16" **STROKE:** 3-1/2
Double action, 303 Stainless steel tube & Rod with aluminum heads. 250 PSI max pressure. 3/16" Dia. steel rod X 1/2" (retracted) with 10-32 UNF-2A thread. Nose mount 7/16-20 UNF-2A threaded. With Mtg. Nut.
L: 6-3/8"O/A **DIA:** 3/4" **WT:** .14

STOCK #	DESC.	1EA
19183-HD	Bimba 7/8" Cylinder	$7.95

NEED PNEUMATIC CYLINDERS! Many more on www.mpja.com

RUBBERIZED MINI MAGNETS

Very small rubberized magnet possibly used with hall effect sensors as position sensing. These magnets are only 20mm long X 2mm wide with an adheasive backing. You receive a strip of 100pcs for one low price.
L: 20mm **W:** 2mm **T:** 1mm **WT:** .02

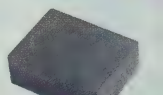
STOCK #	DESC.	1PK	50PK+
14582-MG	100 Rubber Magnets	$1.00	$0.50

RUBBERIZED MAGNET

Rubberized magnet used as part of a cabinet latch. Counter sunk screw holes at each end with a slanted center section with a 1/4" dia. hole for latch pin. Magnet is 1-1/2" X 1/2" wide X 11/32" thick (max).
L: 1-1/2" **W:** 1/2" **T:** 11/32" **WT:** .014

STOCK #	DESC.	1EA	5+EA
11443-MG	RubberMagnet	$0.40	$0.29

BRICK MAGNET



Ferrite magnet block for lab, schools or anyone needing a larger sized magnet.
L: 2-5/8" **W:** 2" **T:** 1" **WT:** .9

STOCK #	DESC.	1EA
19411-MG	Brick Magnet	$1.50

CLAMP-ON DIGITAL AMMETER/MULTIMETER

IDEAL 61-732
Clamp-on meter with 3-3/4 digit (4000 count) LCD display. Features: Non contact AC sensing, 1.2" Jaw opening, "Hold", readings, Auto Power off. With test leads, storage pouch & instructions. Req: 2X 1.5V "AAA" Batteries Not Supplied
Auto-Ranging
Rated CAT III 600V, UL/canada/USA/CE listed
AC CURRENT: 40/400A
Accuracy +-1.7% +6LSD, Frequency 50-60Hz.
AC VOLTS: 400V
Accuracy +-1.2% +5LSD,
600V
Accuracy +-1.5% +5LSD
Frequency 50-500Hz,
Overload 600V AC
Ave responding, Calibrated to RMS Sine wave
DC VOLTS: 400/600V, Accuracy +-.5% + 2LSD
Overload 600VDC,
RESISTANCE: 400,4K,40K, 400K Ohms
Accuracy: +-1% +4LSD
4M Ohms
Accuracy: +-1.5% +4LSD
40M Ohms
Accuracy: +-3% +5LSD
NON CONTACT: Vibrate when Probe near AC Hot Line
CONTINUITY TEST: BUZZER < 25 ohms
H: 7-3/8" **W:** 2-5/8" **T:** 1-1/2" **WT:** 1.1

STOCK #	DESC.	1EA
19417-TE	Ideal 732 Clamp Meter	$49.95

MINI MULTI METER

Light weight 7 function, 3-1/2" digit hand held meter with 1/2" LCD display. Includes 9V battery, test leads, instructions & Protective Boot. Fuse Overload protection.
CE listed; IEC 1010 CatII-600V Compliant
SPECIFICATIONS
DC VOLTS & CURRENT
VOLTS: .2,2,20,200,1KV
CURRENT: 2,20,200mA,10A
Accuracy: .25% + 2 LS digit on 200mV
.5% + 2 LS Digit
1% + 2 LS Digit current
AC VOLTS (Ave responding Calibrated in RMS Sine)
VOLTS: 200,750V
Accuracy: 1.2% + 10 LS Digit
RESISTANCE
Ranges: 200,2K,20K,200K,2M
Accuracy: .8% + 2 LS Digit (1% on 2M)
MISCELLANEOUS
Square Wave test Output: 50Hz,5VP/P, 5K Load
Continunity: Buzzer under 100 ohms
Diode Test: 2.8 VDC open cir.1.5mA max
hfe: Measures Transistor operation
Vce: 2.8V, Ib:10uA
L: 5" **W:** 2-3/4" **T:** 1" **WT:** .5

STOCK #	DESC.	1EA
19113-TE	Pocket Multi Meter	$6.95

CLAMP-ON DIGITAL AMMETER MULTIMETER

IDEAL
61-702 4-IN-1
Clamp-on meter with 3-1/2 digit LCD display. Features: Non contact AC sensing, 1.2" Jaw opening, "Hold" & "Max" readings, Auto Power off. With test leads, storage pouch & instructions. Req: 9V Battery Not Supplied
Not auto-ranging
Rated CAT III 1kV, UL/canada/USA/CE listed
AC CURRENT: 200A, Accuracy +-3% +5LSD, Frequency 50-60Hz.
AC VOLTS: 2V/200V
Accuracy +-1.2% +3LSD
Frequency50-500Hz,
750V
Accuracy +-2% +5LSD
Frequency50-500Hz,
Overload 750V AC
Ave responding, Calibrated to RMS Sine wave
DC VOLTS: 2,200,1000V, Accuracy +-.5% + 1LSD
Overload 1000VDC,
RESISTANCE: 200, 2Kohms
Accuracy: +-1% +3LSD
CAPACITANCE: 200uF, Accuracy: 3% + 5LSD
NON CONTACT: Vibrate when Probe near AC Hot Line
HARMONIC SENSE: LED Indicator Lights
CONTINUITY TEST: BUZZER < 300 ohms
DIODE: 1mA test current, Forward reading between .4-1V indicate functioning junction.
H: 9-3/4" **W:** 3-3/4" **T:** 1-15/16" **WT:** 1.4

STOCK #	DESC.	1EA
19418-TE	Ideal 4-N-1 Clamp Meter	$69.95

AUTO RANGE TRUE RMS DMM

UL Listed, Auto Ranging, Quality 3-3/4 digit (4000 count) DMM with .8" char. ht. LCD display. Data & Range Hold, AC & DC voltage/Current, Frequency, Resistance, Temerature, Capactance, Fused input. Includes Test leads & Temp. probe
Batteries not Included (2 X AA)
DC VOLTS .4V to 1KV, Accuracy .8% +1 LS digit, Impedance 10 Mohm
DC CURRENT 400uA to 20A, Accuracy 1.2% + 5 LS digit, 2% +5LS digit on 20A. Overload .5A Fuse on uA,mA. 20A: 15sec on/30min off. Fused @ 20A
AC VOLTS 4V to 750V, Accuracy 0.8% +8 LS digit, Impedance 10 Mohm
AC CURRENT 400uA to 20A, Accuracy 1.2% + 8LS digit, 3% +5 LS digit on 20A, Overload fuse. 20A: 15sec on/30min off. Fused @ 20A
RESISTANCE 400 to 40M Ohm, Accuracy .8% + 5LS digit, 1.2% + 10LS digit on 40M Ohm.
CAPACITANCE 4nF-100uF, Accuracy 6% +6 LS digit on 40nF, 2% +5 LS digit other ranges
FREQUENCY 4Hz-400KHz, Accuracy .1% + 3 LS digit, 250V max
DUTY CYCLE 0.1%~99.9%, Accuracy1.2% + 2 LS digit, Pulse Width: 100uS~100mS
TEMPERATURE
C: -20~ 300deg Accuracy 3deg. C + 3 LS digit
F: -4~ 572deg Accuracy 3deg. F +6 LS digit
OTHER Continunity buzzer <20Ohm, Diode/Transistor HFE
T: 7-1/4" **W:** 3-3/8" **D:** 1-3/4" **WT:** 1.1

STOCK #	DESC.	1EA
17350-TE	Auto True RMS DMM	$59.00

NEAR FIELD EMF METER

Handheld wide band Microwave Field strength meter. Designed to detect and measure fields eminated from Cell base stations & phones, Microwave ovens & equipment, WiFi links and other nearfield RF equipment found in the Lab, Office or Home.
Display: 3.5digit LCD
Bandwidth: 50MHz-3700MHz
Range: 0.1μW/cm²-100.9μW/cm²
Accuracy: 0.1μW/cm²
Alarm Threshold: 20.0μW/cm²
Alarm Indicator: LED Panel Lamp
Sample Time: <0.3sec.
Operating Temp: -15C° to +60C°
Power: 9V Battery (6F22)
CE Listed
H: 1-1/2" **W:** 2-3/4" **T:** 1-1/4" **WT:** .52

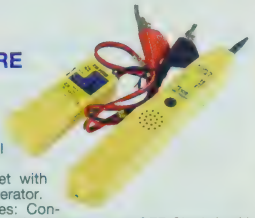
STOCK #	DESC.	1EA
31860-TE	Microwave EMF Meter	$149.95

PISTOL GRIP I/R THERMOMETER

Single hand, Pistol grip type, Non-contact infrared digital thermometer with LASER pointer, Auto Turn Off, selectable "F" or "C" display, LED Backlight. Includes soft sided woven case. CE listed.
Display: 3-1/2 digit Backlit LCD
Detection Range: 5-14um
Range: -58 "F" to +716 "F" (-50 "C" to 380 "C")
Selectable "F" or "C"
Accuracy: +- 2% or 2 deg. "C"
Resolution: .1Deg.
Sample Rate: approx. 2/Sec while holding Trigger. Single shot per trigger pull
Distance Factor: 8/1 (at 8" spot size is 1")
Emissivity Factor: fixed @ .95
Power: 9 VDC battery
H: 6-1/8" **W:** 1-1/2" **L:** 3-1/4" **WT:** .34 **Shp. WT:** .6

STOCK #	DESC.	1EA
9910-TE	I/R Temperature Meter	$24.95

CABLE/WIRE TRACER



JDSU model KP101
Cable Tracer set with Probe & Tone generator.
Generator features: Constant Tone level over life of battery, Auto OFF, Single/multi tone selection andHi/Lo tone level Mode, MOD jack for easy connection to test leads.
Probe features: Non-conductive, inductive tip, Adj. volume level, for noisy work areas.
Both use 9V batteries. Includes: Manuals, Soft carry pouch, batteries, 12in test leads with angled Telco type alligator clips & a 6in. 6 cond. MOD cable.
WT: 1.1

STOCK #	DESC.	1EA
31866-TE	Cable Tracer	$49.95

BACKLIT DMM

3-1/2 digit, 15mm (.6") char. Ht. LCD digital multimeter. Features HOLD Button, backlight button (~5sec. on). With 9V battery, test leads & instructions. Fuse & Diode protected (not 10A range). Yellow protective Boot. CE listed. Cat II use.
Not Auto Turnoff
DC VOLTS 200mV,2,20,200,600, Accuracy .8% + 2 LS digit
DC CURRENT 200uA,2,20,200mA, 10A Accuracy1.5% + 2 LS digit, 250V on 200mV 600V Max
AC VOLTS 200,600V, Accuracy 1.2% + 10 LS digit, 40-400Hz. Ave. Responding, 600V RMS/DC Max
RESISTANCE 200,2K,20K,200K,2M Ohm, Accuracy 1% + 2 LS Digit, 250V RMS Max
DIODE & TRANSISTOR TEST
Diode Displays forward drop
hFE 0-1000 Ib =10ua/Vce=3V
H: 5-3/4" **W:** 3" **D:** 1-1/4" **WT:** .8

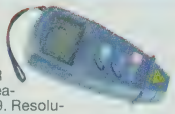
STOCK #	DESC.	1EA
14213-TE	Mini Deluxe Backlit DMM	$14.95

PHONE LINE CHECKER

Phone/LAN line tester checks existing wiring for connection to LAN or Phone systems. Test for USOC/568A/B, Phone lines connected to RJ45 jacks, reversed/open wiring, ect.
WT: .1

STOCK #	DESC.	1EA
19130-TE	Phone Line Checker	$7.95

LASER TACHOMETER



Hand held photoreflective tachometer uses LASER beam. 5 digit LCD display measures RPM from 2.5-99,999. Resolution: .1RPM /2.5-999, 1RPM/above 1000. Features Hi/Lo/ Last reading memory. Powered by 4 "AA" cells (Not Included). Requires reflective area on a non reflective surface. Includes soft storage pouch.

L: 6-1/4" **W:** 2-7/8" **T:** 1-1/2" **WT:** 1.52

STOCK #	DESC.	1EA
12234-TE	LASER Tachometer	$24.95

300VAC PANEL METERS

Snap-in, 3 digit LED panel Voltmeters. Self contained for source and load monitoring in control circuits.
Operating Voltage: 75-300VAC Sine Wave Only
Input Range: 75-300VAC
Resolution: 1V
Character Height: 0.56in. 6" wire leads.

W: 2-3/4" **H:** 1-5/8" **D:** 7/8" **WT:** .06

STOCK #	DESC.	1EA
30220-ME	300VAC Panel Meter Red	$6.95
31493-ME	300VAC Panel Meter Green	$6.95
31494-ME	300VAC Panel Meter Blue	$6.95

AC LINE MONITOR

3 digit LCD Plug In Line Monitor with Blue LED backlight.
Plugs in any NEMA 15 Outlet.
Operating Voltage: 100-300VAC
Resolution: 1V
Character Height: 0.6in.

W: 2-3/16" **H:** 1-5/8" **D:** 1" **WT:** .08

STOCK #	DESC.	1EA
31495-ME	300VAC Line Monitor	$8.95

SNAP-IN LCD PANEL METER PM438

Compact, Snap-In, 200mV 3-1/2 Digit, reflective LCD Digital panel meter with black plastic bezel & face plate. New Chip On Board design for economy as well as compactness. Ideal for battery powered monitoring or test equipment.

Basic meter features:

1/2" character height — Adj. decimal point
Auto polarity — >100Mohm input imp.
2 readings/sec., — .5% accuracy.
Snap-In Through front of panel

9 VDC powered, Meter power must be isolated from input (Cannot monitor own power source).

W: 2-5/8" **H:** 1-9/16" **D:** 3/4" **WT:** .1

STOCK #	DESC.	1EA	10+EA
15978-ME	9V Snap-In LCD DPM	$9.95	$8.95
12073-RS	20V Resistors	$1.00	$0.90
12074-RS	200V Resistors	$1.00	$0.90

LARGE DIGIT PANEL METERS

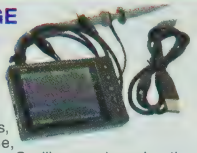
360° WEB

3-1/2 digit, LCD, 200.0mV DC basic input, .8" character height, DPMs with black plastic face. adj. decimal point, auto polarity, >100Mohm input imp. 2 readings/sec., 0.5% accuracy. Snap-in panel mounting.
Built in scaling resistors for 20V, 200V & 500V ranges
5 VDC powered, Meter power and Input can share a common Ground (-input/-Power)

W: 3-3/8" **H:** 1-5/8" **D:** 1" O/A **WT:** .13

STOCK #	DESC.	1EA	10+EA
12306-ME	5V LCD Panel Meter	$9.95	$9.49

DIGITAL STORAGE OSCILLOSCOPE



Arduino Nano V3 DS201 Pro Digital Scope

No toy here; this is a serious, compact & easy to use, pocket 32 Bit Digital Storage Oscilloscope based on the ARM-M3 Arduino Nano Controller.
Features:
10Hz to ~1MHz square wave generator.
Horz. & Vert. Markers
320X240 Color 2.8in LCD display
Analog Bandwidth: 0-200KHz
Sample Rate: 1MSamples/Sec @ 12 bits
Memory Depth: 4096 points
Horiz. Time base: 1uS/div. to 10sec./div.
Vert. Sensitivity: 10mV/div to 10V/div. (1X Probe)
0.5V/div to 100Vdiv. (10X Probe)
Coupling: DC
Trigger: 6 modes: Off, Auto, Norm, 1 Shot, Scan, Fit
Adjustable Lead or Falling Edge
Input: 80V DC+ACp/p Max (1X Probe)
Power: 3.7V/500mAH LiPo battery
USB port for Software upgrades & Battery charging.
Includes: Probe (1x/10X), soft cloth case, USB Cable

L: 3-5/8" **W:** 2-3/8" **D:** 1/2" **WT:** .3

STOCK #	DESC.	1EA
31250-TE	Arduino Digital Scope DS201	$129.95
31249-TE	Arduino Scope spare Probe	$16.95

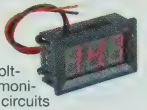
DIGITAL V/A/W METER

Blue Black Light, Snap-in LCD digital panel meter that measures AC Volts, Amps, Watts, Watt hours, Operational Time (Run Time). Ideal for submetering and monitoring.
Input Voltage: 80-270VAC
Input Range Volts: 80-264VAC
Resolution: 0.01V
Input Range Amps: 0-40A
Resolution: Amps: .01
Watts: 0-9000max 6600 recomended
Resolution: 0.1W
Energy Used: 0-9999.99KWh
Run Time: 0-9999.59 Hours
Accuracy: +-1% +-1LSD
3in. Heavy leads

W: 3-3/4" **H:** 1-3/4" **D:** 1" **WT:** .12

STOCK #	DESC.	1EA
31367-ME	Multi Function AC Meter	$15.95

MINI DIGITAL METER

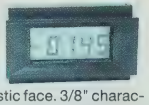


Mini snap-in, 3 digit LED panel Voltmeter. Self contained for source monitoring in battery, solar and control circuits
Operating Voltage: 4.5-30VDC Input Range: 4.5-30V
Resolution: .1/.01 auto Range
Character Height: 0.62in. 6" wire leads.

W: 1-7/8" **H:** 1-1/8" **D:** 7/8" **WT:** .04

STOCK #	DESC.	1EA
30215-ME	Snap-in Red Panel Meter	$5.95
30216-ME	Snap-in Green Panel Meter	$6.95
30217-ME	Snap-in Blue Panel Meter	$6.95

4-1/2 DIGIT PANEL METER



200.00mV DC input, Compact 4-1/2 Digit LCD DPM with black plastic face. 3/8" character height, adj. decimal point, auto polarity, >100Mohm input imp. 2 readings/sec, 0.05% accuracy. Through panel mounting. Holes on board to add scale resistors.
9V powered, Meter power must be isolated from input (Cannot monitor own power source).

W: 2-5/8" **H:** 1-3/4" **D:** 1/2" **WT:** .1

STOCK #	DESC.	1EA	10+EA
7160-ME	4-1/2 Digit Panel Meter	$18.95	$17.95
12073-RS	20V Resistors	$1.00	$0.90
12074-RS	200V Resistor	$1.00	$0.90

DUAL DIGITAL AC V/A METER

Snap-in LED panel meter contains both a 3digit AC Digital Volt Meter and a 3 digit AC Amp. meter. External Current Transformer can be mounted remotely
Character Height: 0.38in.
Voltage: 80-300VAC
Resolution: 1V
Current: 0-99.9A
Resolution: Amps: .1
Accuracy: +-1% +1LSD
Includes 100A Current Transformer with 15mm ID.

W: 2-3/4" **H:** 1-5/8" **D:** 1-1/4"(inc. Con.) **WT:** .15

STOCK #	DESC.	1EA
30301-ME	Digital AC Volt & Amp Meter	$19.95

MINI DIGITAL DC V/A METER

Mini snap-in LED panel meter contains both a 3digit Digital Volt Meter and a 3 digit Amp. meter.
Character Height: 0.28in.
Power Supply Voltage: 4.5-30VDC
Input Voltage: 4.5-30VDC
Resolution: 0.1V
Input Range Amps: 0-10A (9.99)
Resolution: Amps: .01
Accuracy: +-1% +-1LSD
For source monitoring: Input Voltage must be between 4.5 & 30VDC
Ammeter Connects in the return side of Load

W: 1-7/8" **H:** 1-1/8" **D:** 1-1/2"(inc. Con.) **WT:** .06

STOCK #	DESC.	1EA
30303-ME	Dual 30VDC& 10A Meter	$12.95

INPUT POWERED MINI LED METER

Input powered,
2 leaded Battery Monitor
Compact, LED meter with 5in. Red & Black leads
Input: 3.5-30VDC Max
Display: 3 Digit, .375" character height LED/Black Face
Auto range 3.5-9.99/10.0-30.0
2 readings/sec., 1.0% accuracy+-1LSD.
2 screw mounting.

W: 33mm O/A **H:** 15mm **D:** 11mm **W T :**

STOCK #	DESC.	1EA
19598-ME	Self Powered Red LED Panel Meter	$4.95
19599-ME	Self Powered Blue LED Panel Meter	$4.95
19600-ME	Self Powered Green LED Panel Meter	$4.95

LCD PANEL METERS

360° WEB

200mVDC Compact, 3-1/2 Digit, reflective LCD Digital panel meter with black plastic bezel & face plate. Chip On Board design for economy as well as compactness. Ideal for battery powered monitoring or test equipment.

Basic meter features:

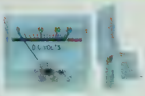
1/2" character height — Adj. decimal point
Auto polarity — >100Mohm input imp.
2 readings/sec., — .5% accuracy.
Through panel mounting.

9 VDC powered, Meter power must be isolated from input (Cannot monitor own power source).
5 VDC powered, Meter power and Input can share a common Ground (-input/-Power)
AVAILABLE: Scaling Resistors for you to install.
20.0 VDC Resistor set **12073-RS**
200 VDC Resistor set **12074-RS**

W: 2-5/8" **H:** 1-3/4" **D:** 3/8" **WT:** .1

STOCK #	DESC.	1EA	25EA	100+EA
6929-ME	9V LCD DPM	$7.95	$6.40	$5.95
15977-ME	5V LCD DPM	$10.95	$9.95	$8.95
12073-RS	20V Resistors	$1.00	$0.80	$0.70
12074-RS	200V Resistors	$1.00	$0.80	$0.70

DC PANEL METERS



ELENCO DC panel meters, Black legends/Red over-ange, Plastic case. Back Mounts in 2" X 1-1/8" cutout
NO MOUNTING HARDWARE
W: 2-1/4" **H:** 1-7/8" **D:** 1-1/4" **WT:** .1

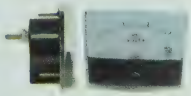
STOCK #	DESC.	1EA	10+EA
5333-ME	0-30V DC Voltmeter	$6.95	$6.59
5336-ME	0-3A DC Ammeter	$6.95	$6.59

SWITCHBOARD PANEL METERS

Quality switchboard panel meters. Accuracy: 2-1/2%. Black legends and pointer on white face with mirror scale. Plastic case with "zero" adjustment. Front mounts in 1-1/2" hole. Four mounting screws on 1-1/4" ctrs. 5A AC meter Includes external CT.
W: 2-3/16" **H:** 1-13/16" **D:** 1-1/2" **WT:** .16 (.30 for 5A)

STOCK #	DESC.	1EA
17681-ME	0-150V AC Voltmeter	$8.95
17683-ME	0-5A AC Ammeter	$9.95

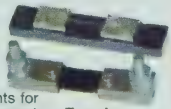
GENERAL USE VOLT & AMP METERS



Quality general use panel meters. Accuracy: 2-1/2%. Black legends on white face. Plastic case with "zero" adjustment. Front mounts in 1.772" (45mm) hole. Two mounting screws on diaognal.
W: 2-3/4" **H:** 2-1/4" **D:** 1-7/8" **WT:** .2

STOCK #	DESC.	1EA
16555-ME	0-30VDC Voltmeter	$7.95
16558-ME	0-15AAC Ammeter	$12.95

DC CURRENT SHUNTS A B,C,D



Panel mount DC current shunts for use with 50mV or 100mV DC ammeters. Type A haveThermoplastic mounting base with mounting holes. Screw terminals for input & meter leads. B,C,D have bolts for input.
A: L: 4-3/4" **W:** 1" **H:** 3/4" **WT:** .2
B: L: 3-7/8" **W:** 3/4" **H:** 1-1/2" **WT:** .42

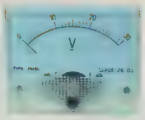
STOCK #	FIG	DESC.	1EA	5+EA
15320-ME	A	10 A/50mV Shunt	$6.95	$5.49
16360-ME	A	30 A/75mV Shunt	$6.95	$5.49
15431-ME	B	100 A/50mV Shunt	$7.95	$6.95

MINI SCOPE PROBE

Mini Oscilloscope probe used with Digital Scopes along several other types of test equipment & analyzers.
Connector: Gold Plated MCX Male
Attenuation: 1X & 10X
Capacitance: 1:1=98pF+- 10pf
10:1+ 33pF +- 4pf
Bandwidth: 1:1= 20MHz
10:1= 60MHz
Max. Input: 600VACp/p/200VDC/600V ACp/p+VDC includes Plastic Storage pouch, Grounding lead, Color identifying rings & pointed tip shield.
L: 44" **WT:** .14

STOCK #	DESC.	1EA
31249-TE	Mini MCX Scope Probe	$16.95

SWITCHBOARD VOLT & AMP METERS



Quality switchboard panel meters. Accuracy rated 2-1/2%. Black legends on white face with red tip pointer. Plastic case with "zero" adjustment. Front mounts in 2-3/8" (60mm) hole.Two mounting screws. AC & DC ranges.
W: 3-1/8" **H:** 2-1/2" **D:** 2-3/8" **WT:** .24

STOCK #	DESC.	1EA	10+EA
8718-ME	0-15V DC Voltmeter	$13.95	$12.95
8719-ME	0-30V DC Voltmeter	$13.95	$12.95
8720-ME	0-50V DC Voltmeter	$13.95	$12.95
8725-ME	0-100uA DCAmmeter	$13.95	$12.95
8726-ME	0-1mA DCAmmeter	$13.95	$12.95
8729-ME	0-100mA DC Ammeter	$13.95	$12.95
8731-ME	0-5A DC Ammeter	$13.95	$12.95
8732-ME	0-15A DC Ammeter	$13.95	$12.95
8733-ME	0-30A DC Meter+ Shunt	$22.95	----
19260-ME	0-100A DC Meter+Shunt	$24.95	----
8722-ME	0-150VAC Voltmeter	$13.95	$12.95
19258-ME	0-25VAC Voltmeter	$13.95	$12.95
8735-ME	0-5A AC Ammeter	$13.95	$12.95
19257-ME	0-10A AC Ammeter	$13.95	----
8736-ME	0-15A AC Ammeter	$13.95	$12.95

40MHZ SCOPE PROBE

Mueller Quality 40MHz oscilloscope probe with a BNC connector to match to most equipment. With ground lead & retractable hook tip, IC tip. For field service, schools or shop. CE Listed
Max Input: X1: <200VDC + Peak AC.
X10: <600VDC + Peak AC
Imped: 1X= 1M ohm 10X= 10M ohm
Bandwidth:1X = >6MHz +-3db. 10X=>40MHz +-3db:
Capacitance 1X = 85-115pF; 10X = 18.5-22.5pF
Includes: Adj. screwdriver, Gnd. Lead, storage Pouch,
L: 1.2m **WT:** .2

STOCK #	DESC.	1EA
18164-TE	Mueller Scope Probe	$8.95

250MHZ HV SCOPE PROBES

Quality 250MHz oscilloscope probes with a BNC connector to match to most equipment.
Impedance: 100X= 100M ohm. With ground lead & retractable hook tip, IC tip.
For field service, schools or shop. CEListed
1.2KV PROBE: Working Voltage: 1,200VDC + Pk AC. Bandwidth: 100X = >250MHz +-3db. Capacitance 1X = 6.5pF(+ scope input)
L: 1.2m **WT:** .2

STOCK #	DESC.	1EA
18147-TE	1.2KV 250MHZ Probe	$34.95

2.0KV PROBE: Working Voltage: 2,000VDC + Pk AC. Bandwidth: 100X = >250MHz +-3db. Capacitance 1X = 6.5pF(+ scope input)
L: 1.2m **WT:** .2

STOCK #	DESC.	1EA
18148-TE	2.0KV 250MHZ Probe	$38.95

SIGN-UP FOR OUR EMAIL SPECIALS ON MPJA.COM

SCOPE PROBES SELECTABLE 10X OR 1X

Quality oscilloscope probes with a BNC connector to match to most equipment. Max Input: 600V AC P/P + DC. Impedance: 1X= 1M ohm: 10X= 10M ohm. With ground lead & retractable hook tip, IC tip.
For field service, schools or shop.
20MHz PROBE: Bandwidth:1X = >15MHz +-3db. 10X=>20MHz +-3db: Capacitance 1X = 46pF; 10X = 15pF, (+ scope input)
40MHz PROBE: Bandwidth:1X = >15MHz +-3db. 10X=>40MHz +-3db: Capacitance 1X = 46pF; 10X = 15pF, (+ scope input)
60MHz PROBE: Bandwidth: 1X = >15MHz +-3db 10X=>60MHz +-3db: Capacitance 1X = 46pF; 10X = 15pF, (+ scope input).
100MHz PROBE: Bandwidth: 1X = >6MHz +-3db 10X=>100MHz +-3db. Capacitance 1X= 150pF; 10X=14pF, (+ scope input).
200MHz PROBE: Bandwidth: 1X = >10MHz +-3db. 10X=>200MHz +-3db: Capacitance 1X = 46pF; 10X = 12pF, (+ scope input):
L: 1.2m **WT:** .2

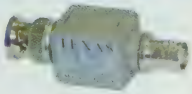
STOCK #	DESC.	EA
15085-TE	20MHz Probe	$7.95 any qty.
15086-TE	40MHz Probe	$8.95 any qty.
8630-TE	60MHz Probe	$9.95 any qty.
8682-TE	100MHz Probe	$15.95 any qty.
15087-TE	200MHz Probe	$18.95 any qty.

DIFFERENTIAL SCOPE PROBE

Quality 35MHz Differential oscilloscope probe with a BNC connector to match to most equipment.
For use in circuits that are referenced to high common mode voltages and floating high voltages.
Bandwidth: 35MHz (-3db)
Impedance: 1/1=10M/5PF
10/1=10M/5PF
100/1= 11M/5PF
Differential DC Input Resistance: 20M Ohm
Max. Input Diff.: Volts: (DC+AC)
1/1=+-10V
10/1=+-100V
100/1=+-1000V
Max. Common Mode:
1/1= +-100V
10/1=+-100V
100/1=+-1000V
Output: +-10V into 1M scope input (2X if into 50Ohm input.)
Output Imp.: 50 Ohms
CMRR: >40db @ 1MHz.
Input leads: 40cm (15in)
Output BNC Cable: 90cm (35+in.)
Ground Lead: (Banana Plug to scope) 16cm (6in.)
lead from BNC connector.
Includes: 2 retractable hook tips for input leads.
and 6V @ 400mA Plug-in power supply
Requires 4 "AA" batteries (Not Included) for portable use.
L: 6.9" **W:** 2.52" **T:** .9" **Ship. WT:** 2.5

STOCK #	DESC.	1EA
18149-TE	Differential Scope Probe	$295.95

ATTENUATORS TERMINATOR



Impedance: 50 ohms+-1%
Range: DC-1GHz
Vswr: <1.5:1
Power: 1W
BNC-M to BNC-F Attenuators & feedthrough terminator for test equipment, probes and fixtures
WT: .2

STOCK #	DESC.	1EA	5+EA
16545-TE	3∓.5db BNC Attenuator	$9.95	$7.95
16546-TE	6∓1db BNC Attenuator	$9.95	$7.95
16547-TE	10∓1.5db BNC Attenuator	$9.95	$7.95
16548-TE	20∓1.5 db BNC Attenuator	$9.95	$7.95
16549-TE	50ohm BNC Terminator	$9.95	$7.95

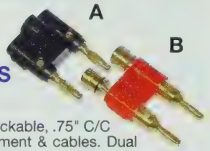
BINDING POST/ BNC ADAPTER

Quality, test adapter features Dual Binding posts to a BNC Male connecor. Binding posts have wire hole and accept Banana Plugs as well. Black Post is connected to BNC Shell & is marked "GND" while the Red Post is connected to BNC center pin.

L: 2-3/8" Body **WT:** .06

STOCK #	DESC.	1EA	10+EA
17579-PL	Binding Post to BNC	$2.95	$2.75

DUAL BANANA/ BINDING POSTS



Quality, Gold plated, stackable, .75" C/C spacing. For test equipment & cables. Dual banana plug with:
Binding Posts OR Set screws to attach wire, cable, component or spade lugs.

WT: .11(Banana/Posts) WT: .03 (Banana only)

STOCK #	DESC.	1EA	10+EA
14901-PL	Red Dual Banana Plug A	$1.25	$0.99
14902-PL	Black Dual Banana Plug A	$1.25	$0.99
14903-PL	Red Dual Binding Post B	$2.50	$1.95
14904-PL	Black Dual Binding Post B	$2.50	$1.95

DUAL BINDING POSTS

Red & Black, safety binding posts accept banana plug in top or wire through hole in side. All front panel connections are recessed to pervent contact. Mounts in double .50" holes on .75" ctr. Solder terminals onback.

WT: .07

STOCK #	DESC.	1EA	10+EA
14492-PL	Dual BindingPost	$1.95	$1.75

TELCO TYPE TEST CLIPS

Mueller JP-8078, 2-1/4"Angled Telco alligator clips with cable piercing tool steel spike. Designed to grip punch-down blocks as well as wire posts etc. Nickel-silver, with brass screw, washer & bronze lock washer. Includes pair of clips plus 1 Red & 1 Black flexible vinyl boot. For test leads, clip leads, or test jigs.

L: 2-1/4" **WT:** .088

STOCK #	DESC.	1EA
18160-TL	Mueller Telco Gator Clips	$4.95

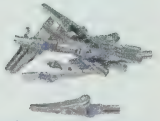
MICRO CLIP TEST LEADS

Red & Black test leads with Banana Plugs on one end and Micro clips on the other.

L: 24" **WT:** .05

STOCK #	DESC.	1EA	10+EA
31182-TE	24in. Test Hook Leads	$1.95	$1.79

ALLIGATOR CLIPS



H.H. Smith: #350
10pc. pack of 2" bright Tin Plated steel alligator clips. Can be soldered, accepts a banana Plug attached using the screw. For test leads, clip leads, or test jigs.

L: 2"O/A **H:** 1/2" O/A **WT:** .1

STOCK #	DESC.	PR/10
18612-AL	Smith Alligator Clips	$2.95

MULTIMETER PROBE SET

Safety probe set includes:
1m Red & Black base leads with right angle Banana Plug on meter ends, use with interchangable test ends below.
Probes: 4-1/8" Banana Plug /Sharp Probe tip.
Crocodile Clips: 3-1/4" insulated
Hook (Flea) Clips: 2-1/4" with 10" leads
Cloth folding tool bag with pouches

L: 1m+ **WT:** .5

STOCK #	DESC.	1EA
19580 -TE	Test Leads Set	$19.95

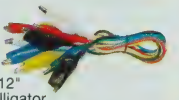
ALLIGATOR CLIP LEAD SET

Handy set of 10 multi colored clip leads. 26 AWG leads 12" long , with insulated 27mm or 35mm alligator clips on each end, 2 leads each in five colors. For shop or lab.

L: 12" **WT:** .2

STOCK #	DESC.	1EA	5+EA
3569-TE	Mini Clip Lead Set 27mm	$1.95	$1.75
16434-TE	Clip Lead Set 35mm	$2.50	$1.99

MED. ALLIGATOR CLIP LEAD SET



Handy set of 5 multi colored clip leads. 24 AWG leads 12" long , with insulated 45mm alligator clips on each end, 1 lead each in five colors. For shop or lab.

L: 12" **WT:** .2

STOCK #	DESC.	1EA	5+EA
16435-TE	Med. Clip Lead Set	$2.50	$1.99

TEST HOOKS

Red & Black beryllium copper test hooks designed to clip to component leads leaving your hands free.1-1/2" probe length, 2-1/4" long overall, 1/2" body Dia. Add your own wire for custom lengths. For lab, shop or school.

WT: 005

STOCK #	DESC.	1EA	25+EA
7161-MI	Red Component Clip	$0.50	$0.45
7163-MI	Black Component Clip	$0.50	$0.45

18AWG ALLIGATOR CLIP LEADS

Handy set of 2 Red, 2 Black & 1 Green clip leads. 18 AWG leads 20" long , with insulated alligator clips on each end For shop or lab.

L: 20" **WT:** .2

STOCK #	DESC.	1EA	10+EA
16050-TE	5pc. Clip Lead Set	$1.65	$1.25

BANANA PLUGS

Black banana plugs with nickel plated brass Four leaved spring tip, thermoplastic cover. Solder connection.

WT: 05

STOCK #	DESC.	1EA	10+EA
8070-PL	Red Banana Plug	$0.25	$0.19
8071-PL	Black Banana Plug	$0.25	$0.19

MICRO CLIP TEST LEADS

Red & Black test leads with a molded BNC Female on one end and Micro clips on the other.

L: 5" **WT:** .03

STOCK #	DESC.	1EA	10+EA
17559-TE	5in. Test Hook Leads	$3.95	$2.95

POWERED PROTOTYPING SYSTEM

Breadboard with built-in multi-output power supply with LCD Meters. Dual LCD Meters monitor the + & - Variable output supplies.
Features: 2 LCD Voltmeters, 4 power supply binding posts, 5 Distribution strips (500 pts), 3 Breadboard panels (1890Pts.), one +5VDC @ 1A supply, one 0 to +15VDC @ .5A supply, one 0 to-15VDC @ .5A supply
All parts are mounted in a metal case. Includes 6ft. IEC power cord.

W: 8" **D:** 10-1/2" **T:** 3-1/2" **WT:** 5.7

STOCK #	DESC.	1EA
17710-TE	Metered Powered Breadboard	$89.95

POWERED BREADBOARD

Breadboard with attached 3.3V & 5V power supplies.
Features: 2 Distribution strips (200 pts), Breadboard panel (830Pts.), a +3.3VDC & +5VDC power supplyBoard. Max total load:700mA. Supply Board plugs into breadboard. Selectable 5V, 3.3V or No Bus voltage for both bus strips. Power On/Off switch on board. Input power from USB Port or 5.5/2.5mm power jack. 6.5-12VDC input range. Includes a 12V Plug supply.Panel cutout: 45.5 X 26.5mm

WT: .5

STOCK #	DESC.	1EA
30176-TE	Powered Breadboard	$9.95

50A BINDING POSTS

Heavy Duty safety nickel plated brass binding posts accept banana plug in top. Rated 50A@30VAC/60VDC.All front panel connections are recessed to prevent contact. Mounts in 15/32" hole + 2 anti-rotation notches. M6 Stud with nut & Washer on back.

H: 2-1/16" **Dia:** 3/4" **WT:** .06

STOCK #	DESC.	1EA	10+EA
19571-PL	Red 50A Binding Post	$1.95	$1.75
19572-PL	Black 50A Binding Post	$1.95	$1.75
19573-PL	Green 50A Binding Post	$1.95	$1.75

TEST CABLES

RG-58U test cable with a molded strain relief
BNC connector on one end and red & black clips on the other. RG-58 cable is 3ft long with an additional 8" of black & Red wire from a strain relief to the clips.

L: 40" **WT:** .3

STOCK #	DESC.	1EA	5+EA
2802-TE	Test Hook Cable	$3.99	$2.99
19027-TE	Alligator clips Cable	$3.99	$2.99
19026-TE	Banana Plugs Cable	$3.99	$2.99

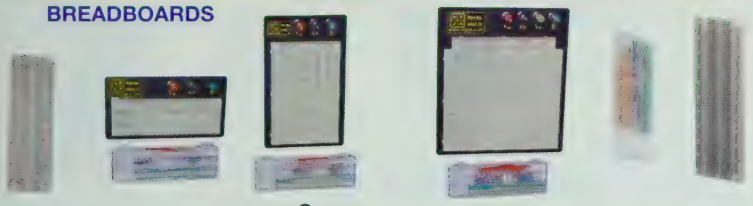
SAFETY BANANA JACKS

Safety style Banana Jacks with brass barrel & thermoplastic cover. Top opening for accepts standard as well as newer required Safety type with shrouded banana plug. Includes mounting nut. Solder tab terminal. Mounts in 15/32in. hole.

H: 1-1/8" O/A **Dia:** 9/16" **WT:** .011

STOCK #	DESC.	1SET	10+SET
30080-PL	Red Safety Banana Jack	$1.25	$0.99
30081-PL	Black Safety Banana Jack	$1.25	$0.99
30082-PL	Green Safety Banana Jack	$1.25	$0.99
30083-PL	Yellow Safety Banana Jack	$1.25	$0.99
30084-PL	Blue Safety Banana Jack	$1.25	$0.99

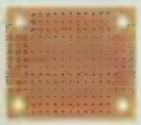
BREADBOARDS



White ABS plastic body (except G clear) , Aluminum mounting base for figures B,C,D and E. Nickel plated phosphor bronze contacts. Contact resistance less than 1 milliohm @ 1kHz. Tested for over 10,000 cycles. Snap lock molded dovetail for combining multiple boards, Suitable for 19-29 AWG wire & all DIP size components. Please visit our web site for more detailed information.

STOCK #	FIG.	DESCRIPTION	SIZE L X W	WT.	1EA	10EA
4443-TE	A	830 point	6-1/2" X 2-1/8"	.3	$4.95	$3.95
4444-TE	B	830 point 3 Binding Post and Jumper kit	7-7/8" X 4-1/8"	.6	$9.95	$8.95
4445-TE	C	1660 point 3 Binding Post and Jumper Kit	8-3/8" X 5-1/8"	.9	$12.95	$11.49
4447-TE	E	3220 point 4 Binding Post and Jumper Kit	10-3/8" X 9-1/8"	1.5	$22.95	$19.49
7027-TE	F	140 Piece 22 AWG Jumper Wire KIt		.3	$3.95	$3.49
18103-TE	G	830 point Clear ABS Body	6-1/2" X 2-1/8"	.3	$4.95	$3.95

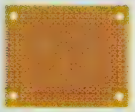
1-3/4" X 1-1/2" PROTO BOARD



Single Sided
.062"phenolic board
.1" pad spacing
unplatedcopper pads
Mini general purpose prototyping board. 17 X 14 grid pattern with 202 total holes (9 missing in corners). Holds 1+ 14 or 16 pin ICs with room for several discrete components. Ideal for interface or signal isolation circuits. **Fits 15917-BX Case.**
L: 1-3/4" **W:** 1-1/2" **WT:** .009

STOCK #	DESC.	1EA	10+EA
15918-PB	Mini Proto Board	$0.59	$0.49

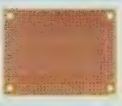
2-5/16" X 1-15/16" PROTO BOARD



Single Sided
.062"phenolic board
.1" pad spacing
unplatedcopper pads
Mini general purpose board for prototyping. 23 X 18 grid pattern with 378 total holes (9 missing in corners). Holds 2+ 14 or 16 pin ICs with room for several discrete components. Ideal for interface or signal isolation circuits. **Fits 15915-BX.**
L: 2-5/16" **W:** 1-15/16" **WT:** .013

STOCK #	DESC.	1EA	10+EA
16227-PB	Small Proto Board	$0.79	$0.49

3-3/16" X 2-1/2" PROTO BOARD



Single Sided, .062"phenolic board, .1" pad spacing, unplated copper pads. 31 X 24 grid pattern with 708 total holes (9 missing in corners). Holds 3+ 16 pin ICs. **Fits 15913-BX Case.**
L: 3-3/16" **W:** 2-1/2" **WT:** .024

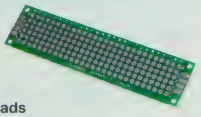
STOCK #	DESC.	1EA	10+EA
15914-PB	Medium Proto Board	$1.10	$0.89

4-5/16" X 3-1/8" PROTO BOARD

Single Sided
.062"phenolic board
.1" pad spacing
unplatedcopper pads
General purpose board for prototyping. 42 X 31 grid pattern with 1293 total holes (9 missing in corners). Holds 10+ 14 or 16 pin ICs with room for several discrete components. Ideal for interface or signal isolation circuits. **Fits 15911-BX Case.**
L: 4-5/16" **W:** 3-1/8" **WT:** .036

STOCK #	DESC.	1EA	10+EA
15912-PB	Large Proto Board	$1.75	$1.25

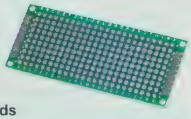
3-1/8" X 13/16" PROTO BOARD



Double Sided
.062"FR-4 board
.1" pad spacing
Plated through copper pads
Mini general purpose prototyping board. 6 X 28 grid pattern with 168 total holes Holds 1+ 14 or 16 pin ICs with room for several discrete components. Ideal for interface or signal isolation circuits.
L: 3-1/8" **W:** 13/16" **WT:** .011

STOCK #	DESC.	1EA
30123-PB	Mini FR-4 Proto Board	$0.99

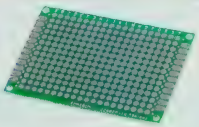
2-3/4" X 1-3/16" PROTO BOARD



Double Sided
.062" FR-4 board
.1" pad spacing
Plated through copper pads
Mini general purpose prototyping board. 10 X 24 grid pattern with 240 total holes Holds 1+ 14 or 16 pin ICs with room for several discrete components. Ideal for interface or signal isolation circuits. 4 corner mounting holes
L: 2-3/4" (7cm) **W:** 1-3/16" (3cm) **WT:** .012

STOCK #	DESC.	1EA
31253-PB	Double Side Proto Board	$1.19

2-3/8" X 1-5/8" PROTO BOARD



Double Sided
.062" FR-4 board
.1" pad spacing
Plated copper pads
Mini general purpose prototyping board. 20 X 14 grid pattern with 280 total Plated through holes. 12 "finger pads" on both ends. Holds 1+ 14 or 16 pin ICs with room for several discrete components.
L: 2-3/8" (6cm) **W:** 1-5/8" (4cm) **WT:** .016

STOCK #	DESC.	1EA
31091-PB	Double Side Proto Board	$1.49

16 PIN ADAPTER BOARD

Double Sided
.062" FR-4 board
Plated copper pads
Mini adapter board converts 16 lead SO/SOP/SOIC/SSOP/TSSOP & MSOP packages to a 16 pin .1" pitch X .6" width (2.54mm X 15.24mm) DIP pattern. **Pins not Supplied**
L: 13/16" (25.5mm) **W:** 23/32" (18mm) **WT:** .002

STOCK #	DESC.	1EA
31405-PB	16 Pin Adapter Proto Board	$0.99

20 PIN ADAPTER BOARD

Double Sided
.062" FR-4 board
Plated copper pads
Mini adapter board converts 20 lead SO/SOP/SOIC/SSOP/TSSOP & MSOP packages to a 20pin .1" pitch X .6" width (2.54mm X 15.24mm) DIP pattern. **Pins not Supplied**
L: 1" (25.5mm) **W:** 23/32" (18mm) **WT:** .002

STOCK #	DESC.	1EA
31406-PB	20 Pin Adapter Proto Board	$0.99

BOARD ETCHANT

Dry concentrated Ferric Chloride. A dry powder that is mixed with water to produce a liquid used to remove the excess copper from PC board material. 1/4 lb. will makeup 1 pint of etchant solution. 1 pint will etch approx. 200sq/in of 1 oz. copper single side board. NOTE: Must be mixed/stored/used in glass or plastic containers NO metal!
WT: .5/1.1

STOCK #	DESC.	1EA	5+EA
14894-DT	1/4 lb. Etchant	$5.25	$4.75

PREMIER BOARD DEVELOPER

Concentrated developer (not etchant) for PREMIER Resist coated board material. Mix 10/1 with water. 10 oz. of mix will develop 10-22sq. ft. of board depending on art complexity.
WT: .2/.6

STOCK #	DESC.	1EA	5+EA
14890-DT	2oz. Developer	$7.95	$7.49
14891-DT	4oz. Developer	$13.95	$13.49

BURNISHING TOOLS

A Quality stylus tool that will give you a better, eaiser job with dry transfer DIRECT ETCH patterns. For characters, lines & patterns. Back end has 3/8i felt burnisher
Standard: patterns .08-.25
Spoon Tip: Patterns .25in. & larger
WT: .1

STOCK #	DESC.	1EA	5+EA
14873-DT	Standard Tool	$4.95	$3.95
14874-DT	Spoon Tip Tool	$5.99	$5.75

CONTACT EXPOSURE FRAME

For board material up to 9in. X 12in. Metal frame holds your artwork tight aginst the PC Board during exposure. Includes Metal frame, Glass Front cover, backing board & instructions.
WT: 3

STOCK #	DESC.	1EA	5+EA
14892-DT	ER-10 Exposure Frame	$28.95	$23.95

RESIST PENS

Lacquer based black resist ink can be used directly on bare copper boards to touch up breaks, add a trace etc. before etching, Can also be used on clear film artwork (Positives)to correct or add traces before exposing board.
WT: .04

STOCK #	DESC.	1EA
14876-DT	Fine Point Pen	$2.25
14877-DT	Extra Fine Point Pen	$2.45

THOUSANDS more Items on www.mpja.com

"DUST OFF" AEROSOL DUSTER

FALCON Dust-Off" , 12oz. can of duster used to blow dust and durt off equipment. Includes extension tube for hard to reach spots. Contains difluoroethane, Does not contain CFC's!. CANNOT BE SHIPPED AIR

WT: 1

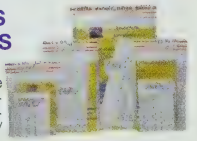
STOCK #	DESC.	1EA	4+EA
16495-CE	DUST-OFF Duster	$4.95	$4.00

COPPER CLAD BOARDS

Double (DS) or single sided (SS) copper clad PC Board material. Standard 1/16" thick FR4 Base material with1oz. copper/side

STOCK #	DESC.	WT.	1EA	5+EA
14868-DT	3" X 5" S/S	.1	$1.95	$1.49
14869-DT	4" X 6" S/S	.12	$2.25	$1.95
14870-DT	6" X 9" S/S	.3	$4.75	$3.95
14871-DT	6" X 6" D/S	.2	$3.95	$3.25
14872-DT	8" X 10" D/S	.4	$12.49	$10.95

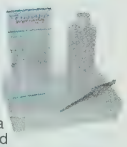
PREMIER SERIES COATED BOARDS



Premier Series boards are ideal for repeatedly making PC boards from POSITIVE films (Opaque lines/patterns on clear film). Resist coated Premier boards do not require U/V light, only a 100W light bulb. Double (DS) or single sided (SS) copper clad PC Board material. FR4 Base material with1oz. copper/side coated with resist and covered with a peel off plastic sheet (removed before exposer). Exposing frame recommended.

STOCK #	DESC.	WT.	1EA	5+EA
14880-DT	3" X 4" S/S	.1	$4.95	$4.49
14881-DT	3" X 6" S/S	.12	$5.95	$4.95
14882-DT	4" X 6" S/S	.15	$6.82	$5.99
14883-DT	6" X 9" S/S	.3	$11.00	$10.85
14884-DT	6" X 12" S/S	.4	$17.95	$15.95
14885-DT	3" X 4" D/S	.1	$5.49	$4.49
14886-DT	6" X 6" D/S	.22	$10.95	$9.95
14887-DT	6" X 9" D/S	.33	$13.95	$12.49
14888-DT	6" X 12" D/S	.5	$19.95	$18.95

TIN PLATING KIT



Will plate a copper board with a bright, protective tin plate approx. .0004" thick. Improves solderibility, resists oxidation/tarnish & produces a professional appearance. Supplied as a dry power concentrate. When mixed will plate approx. 600sq./in. Kit includes: Concentrate, Tray, handling tool & 16oz. storage bottle for mix.

WT: .6/.4

STOCK #	DESC.	1EA	5+EA
14896-DT	Tin Plating Kit	$16.95	$15.49
14897-DT	1 Pt. Concentrate	$7.50	$7.25

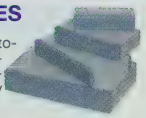
COPY SHEETS

8-1/2" X 11" clear film suitable for LASER copier or printer to make artwork POSITIVES from magazines etc. Also can be used by directly taping, placing patterns or opaque inks to generate artwork. PACK of 5 Sheets

WT: .12

STOCK #	DESC.	1EA	5+EA
14875-DT	5pcs. Copy Film Sheets	$4.49	$3.75

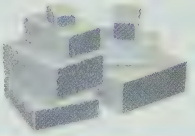
PLASTIC SNAP CASES



2 tone (Light Gray/Gray), snap together small case made from Hi-impact UL-94-HB ABS Plastic. Interlocking Top & Bottom held by snap-on Front & Back.
4 molded standoffs on 17547/48
6 molded standoffs on top & bottom 17550-BX
Stick-on Feet: 8.3mm dia Clear: Order **17551-HD** (4pcs.) 6mm dia Black: Order **17552-HD**

STOCK #	DIM. (W/D/Hin)	WT.	1EA
17547-BX	4.13 x 1.61 x0 .99 Box	.08	$2.95
17548-BX	5.12 x 2.99 x 1.18 Box	.17	$3.75
17550-BX	7.87 x 4.76 x1.57 Box	.5	$4.95

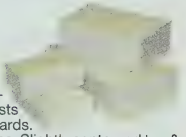
PLASTIC INSTRUMENT CASES



Clamshell design ABS plastic instrument case. Internal posts for holding PC boards. Light gray shells with Dark Gray endplates. Slightly contoured top & bottom. Includes 4 screws.

STOCK #	DIM. (W/L/Hin)	WT.	1EA	10+EA
17198-BX	7.9 x 11 x 3.15	1.26	$17.95	$14.95
17199-BX	3.5 x 2 x 1.3	.1	$3.95	$3.59
17200-BX	4.72 x 2.36 x 2	.24	$5.95	$4.95
17201-BX	5.9 x 3.15 x 2.4	.37	$7.95	$6.95
17202-BX	7.5 x 3.9 x 3.15	.66	$11.95	$9.95

CLAMSHELL CASES



Clamshell design plastic instrument case. Internal posts and slots for holding PC boards. Off white shells and end plates. Slightly contoured top & bottom. Square front face. O/D listed below

17800-BX: **L:** 7.5" **W:** 4.7" **H:** 2.4" **WT:** .51
17801-BX: **L:** 4.7" **W:** 3.2" **H:** 1.6" **WT:** .21
17802-BX: **L:** 5.9" **W:** 3.8" **H:** 2.1" **WT:** .4
17803-BX: **L:** 3.9" **W:** 2.75" **H:** 1.4" **WT:** .15

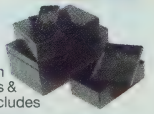
STOCK #	DESC.	1EA
17800-BX	7.5in. Clamshell Case	$4.95
17801-BX	4.7in. Clamshell Case	$3.49
17802-BX	5.9in. Clamshell Case	$4.59
17803-BX	3.9in. Clamshell Case	$3.39

PLASTIC PROJECT CABINETS

Black plastic project boxes with flat lids. Internal guides on ends & sides for holding PC boards. Includes cover screws. Outside Dimn. Shown 15881-BX NO Internal Guides

STOCK #	DIM. (L/W/Hin)	WT.	1EA	10+EA
15522-BX	3 x 2 x 1.16 Box	.07	$1.95	$1.59
15523-BX	4 x 3 x 1.6 Box	.13	$2.49	$1.95
15881-BX	4.41 x 2.24 x .87 Box	.08	$1.95	$1.59
15518-BX	5 x 2.5 x 1.75 Box	.17	$2.95	$2.49
15882-BX	5.9 x 3.9 x 2.36 Box	.27	$3.49	$2.95
15883-BX	7.25 x 4.5 x 2.52 Box	.50	$5.49	$4.49

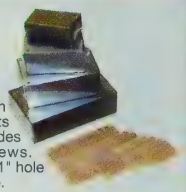
PLASTIC PROJECT CABINETS



Black plastic project boxes with deep lids. Internal guides on ends & sides for holding PC boards. Includes cover screws. Outside Dimn. Shown

STOCK #	DIM. (L/W/Hin)	WT.	1EA	10+EA
15885-BX	3.74 x 1.89 x 1.46 Box	.11	$2.95	$2.49
15886-BX	4.53 x 2.46 x 1.73 Box	.15	$3.49	$2.95
15520-BX	5.3 x 3 x 1.9 Box	.14	$3.95	$3.49
15887-BX	6.3 x 3.74 x 2.44 Box	.33	$3.95	$2.95
15888-BX	7.6 x 4.53 x 2.95 Box	.43	$7.95	$6.49
15521-BX	8.8 x 5.5 x 3.6 Box	.75	$7.95	$7.25

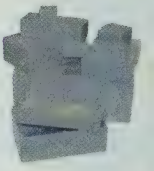
PLASTIC PROJECT CABINETS & PERF BOARDS



Black plastic project boxes with Aluminum lids. Internal posts for holding PC boards. Includes cover & perf board screws. Solderable Perf. Board has .1" hole grid pattern, copper one side.
All Dimn. Approxmate.
Large Box: L: 5-1/4" W: 3-1/4" D: 1-9/16" WT: .22
Large Perf. Board: L: 4-1/4" W: 3-1/8" T: 1/16" WT: .04
Med Box:L: 4-1/8" W: 2-5/8" D: 1-9/16" WT: .15
Med Perf. Board: L: 3-1/8" W: 2-1/2" T: 1/16" WT: .02
Small Box: L: 3-5/16" W:2-1/8" D: 1-3/8" WT: .11
Small Perf. Board: L: 2-1/4" W: 1-7/8" T: 1/16" WT: .02
Mini Box: L: 2-11/16" W: 1-11/16" D: 1-3/16" WT: .08
Mini Perf. Board: L: 1-3/4" W:1-1/2" T: 1/16" WT: .007

STOCK #	DESC.	1EA	10+EA
15911-BX	Large Project Box	$4.95	$3.25
15912-PB	Large Perf. Board	$1.75	$1.25
15913-BX	Medium Project Box	$3.50	$2.49
15914-PB	Medium Perf. Board	$1.10	$0.89
15915-BX	Small Project Box	$2.75	$1.85
16227-PB	Small Perf. Board	$0.79	$0.69
15917-BX	Mini Project Box	$2.50	$1.69
15918-PB	Mini Perf. Board	$0.59	$0.49

SEALED PROJECT BOXES

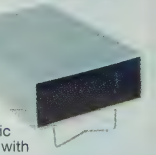


Gray ABS plastic project boxes with lids. Tongue & grove sealing meet IP-65 & NEMA 4 requirements. 4 standoffs on base for holding PC boards. Includes stainless cover screws & neoprene gasket material. Outside Dimn. Shown.
17390, 391, 17400-17407 NO Internal Guides

STOCK #	DIM. (L/W/Hin)	WT.	1EA
17390-BX	2.52 x 2.28 x 1.38 Box	.13	$3.95
17391-BX	7.24 x 1.42 x 1.38 Box	.23	$6.95
17392-BX	4.53 x 3.54 x 2.17 Box	.35	$6.95
17393-BX	6.73 x 4.76 x 2.17 Box	.54	$9.95
17395-BX	6.73 x 4.76 x 3.15 Box	.73	$10.95
17396-BX	7.68 x 3.15 x 2.17 Box	.49	$7.95
17398-BX	10.43 x 7.28 x 3.74 Box	1.5	$19.95
17399-BX	2.05 x 1.97 x 1.38 Box	.09	$3.95
17400-BX	3.23 x 3.15 x 2.17 Box	.27	$5.95
17402-BX	7.87 x 4.72 x 2.95 Box	.8	$11.95
17404-BX	6.3 x 6.3 x 3.54 Box	.85	$12.95
17405-BX	9.45 x 6.3 x 4.72 Box	1.5	$19.95
17406-BX	11.81 x 9.06 x 4.37 Box	2.4	$32.95
17407-BX	14.17 x 7.87 x 5.91 Box	3.1	$29.95

SIGN-UP FOR OUR EMAIL SPECIALS ON MPJA.COM

INSTRUMENT CASE

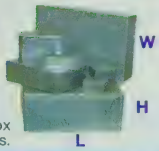


PACTEC CMB69-240, Bone colored Clamshell design ABS plastic instrument case. Inside coated with shielding. Internal posts for holding PC boards up to 9.06 X 5.78". Slightly contoured top & bottom. Includes: Steel Bail (foot), 4 screws & 2 rubber feet. NO END PANELS

D: 9.5" **W:** 6.38" **H:** 2.59" **WT:** .92

STOCK #	DESC.	1EA
31554-BX	PAC-TEK CM69-240 Case	$9.95

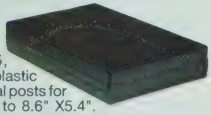
DIE CAST ALUMINUM BOXES



ADC12 Aluminum alloy,
Cover & M3.5 Screws included,
Natural Bare Aluminum Finish
AVAILABLE ON-LINE
Sealing Gasket to make box weather resistant to IP-66 Specs.

STOCK #	L"	W"	H"	WT.	1EA
16281-BX	2.36	2.17	1.18	.18	$3.60
16282-BX	3.15	2.17	0.98	.2	$3.90
16283-BX	3.50	1.37	1.18	.16	$3.54
16284-BX	4.49	2.52	1.18	.28	$5.34
16285-BX	4.49	2.52	2.17	.36	$6.54
16286-BX	4.49	3.50	2.17	1.30	$8.01
16287-BX	4.72	3.94	1.38	.56	$7.77
16288-BX	5.51	3.94	2.95	.86	$11.22
16289-BX	6.50	5.00	2.95	1.12	$14.79
16290-BX	6.73	4.76	2.17	.96	$13.41
16291-BX	6.73	4.76	4.17	1.40	$16.62
16292-BX	8.74	5.75	2.17	1.44	$17.91
16293-BX	8.74	5.75	4.17	1.94	$24.27
16294-BX	9.84	9.84	3.94	3.50	$44.88
16295-BX	10.83	6.89	2.56	2.08	$26.91

INSTRUMENT CASE



PACTEC CM59-135,
Clamshell design ABS plastic instrument case. Internal posts for holding PC boards up to 8.6" X5.4".
Black shells and endplates. Slightly contoured top & bottom. Includes 4 screws & 4 rubber feet.

D: 8.79" **W:** 5.57" **H:** 1.54" **WT:** .65

STOCK #	DESC.	1EA
17695-BX	PAC-TEK CM59-135 Case	$4.90

GRAY & BEIGE PLASTIC CABINETS

Beige clam shell plastic project boxes with gray end plates. Internal 1/4" high threaded standoffs on both halves for PC boards. Includes cover screws, NO PC board mtg. screws.

L: 7.7" **W:** 4.3" **H:** 3" **WT:** .66

STOCK #	DESC.	1EA	10+EA
15519-BX	3" Thk. Two Tone Case	$8.95	$7.95

CLEAR FEET

Clear polyurethane stick-on feet.
Sold in strip of 4pcs.

Dia: 8.3mm (.32") **H:** 2.6mm (.1") **WT:** .005

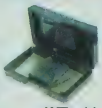
STOCK #	DESC.	1PK
17551-HD	Clear Rubber Feet	$0.49

RACK SCREWS

Pack of 10-32 Heat Treated Steel Phillips screws 3/4" long with nylon washers for mounting panels in racks

STOCK #	DESC.	WT.	1EA
17246-RK	50pk 10-32 Rack Screws	.3	$4.95
17247-RK	100pk 10-32 Rack Screws	.6	$8.95

ESD BOX

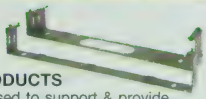


USED Black Plastic ESD safe Transport box with hinge & latch. Internal Easily removed metal plate with a special ZIF socket. 5-1/8" X2-7/8" X1" internal space.

L: 5-3/4" **W:** 3-1/2" **T:** 1-1/2" **WT:** .44

STOCK #	DESC.	1EA
19465-BX	ESD Safe Box	$3.95

WALL PANEL BRACKETS



VIDEO MOUNT PRODUCTS

Hinged Wall brackets used to support & provide easy access to backs of 19" rack panels. Black, static resistant Powder Coated steel. Left or right side swing. 4" depth. Includes 10 & 12-32 Rack Mount Screws.

STOCK #	PICT.	VMP#	HT.	WT.	1EA
17243-RK	A	ER-HWB1	1U	1.5	$16.95
17244-RK	B	ER-HWB2	2U	2.3	$18.95

EQUIPMENT SLIDES

Accuride, 3 section, Zinc plated steel, ball bearing equipment/drawer slides. Front disconnect allows removal of chassis from cabinet. Side mounting. Side Space: 3/8". Closed Position: 20", Fully Extended: 42", Slide Travel: 22", Max Load: 100lbs/pair. Sold as pairs.

L: 20" **H:** 1-3/8" **T:** 3/4" **WT:** 5/pair

STOCK #	DESC.	1+EA
17418-RK	Pair Equipment/Drawer Slides	$24.95

STEEL 19" RACK PANELS

VIDEO MOUNT PRODUCTS

Cold rolled steel drilled & notched for standard rails, Black Powder coat finish

STOCK#	VMP #	HEIGHT	WT.	1EA
17237-RK	ER-1B	1U (1-3/4")	.7	$4.95
17238-RK	ER-2B	2U (3-1/2")	1.3	$7.95
17239-RK	ER-4B	4U (7")	2.7	$13.95
17240-RK	ER-8B	8U(14")	5	$19.95

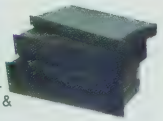
LCD MONITOR RACK MOUNT

VIDEO MOUNT PRODUCTS

Rack mount or monitors with 75 & 100mm VESA mounting pattern. Recess mounts10-17" monitors and can be inverted for up to 23" models, 50lbs. max weight. Black, static resistant Powder Coated steel. Mounting hardware included

STOCK#	VMP#	HT.	WT.	1EA
17245-RK	ER-LCD1017	9U	12	$66.95

19" RACK MOUNT CABINETS



Black plastic rack mount clamshell cases. Vented sides with removable front & rear panels. Internal standoffs on top & bottom. Assembly required.
internal space:
17086-BX 16-3/16" X 7-11/16" X 1"
17087-BX 16-3/16" X 7-11/16" X 2-7/8"
17088-BX 16-3/16" X 7-11/16" X 4-1/2"
W: 19" **D:** 8"

STOCK#	DESC.	WT.	1EA
17086-BX	1U Rack Cabinet	1.9	$19.95
17087-BX	2U Rack Cabinet	2.5	$29.95
17088-BX	3U Rack Cabinet	3.0	$39.95

19" RACK CABINETS

19in. rack mount cases. 1/8in. Aluminum Front Panel with steel chassis & covers. Satin black textured paint.
17811-BX: **W:** 19" **D:** 11.8" **H:** 1-3/4" **WT:** 5.8
17812-BX: **W:** 19" **D:** 11.9" **H:** 3-1/2" **WT:** 7.2

STOCK#	DESC.	1EA
17811-BX	1U Metal Rack Cabinet	$34.95
17812-BX	2U Metal Rack Cabinet	$39.95

RELAY RACKS

VIDEO MOUNT PRODUCTS

All Aluminum
9ga. Rails Drilled & Tapped 10-32, EIA std. spacing, 5ga. "L" base plates. Available in: Black Powder Coat finish
Shipped unassembled with hardware

STOCK#	COLOR	VMP P/N	HEIGHT	WT.	1EA
17226-RK	Black	ER-72	72	28	$159.95
17227-RK	Black	ER-84	84	28	$172.95

19" HEADEND RACKS

VIDEO MOUNT PRODUCTS

13ga. Steel Rails Drilled & Tapped 10-32, EIA std. spacing, 16ga. Base, Black static resistant Powder Coat finish.
Shipped unassembled with hardware

STOCK#	COLOR	VMP P/N	HEIGHT	WT.	1EA
17228-RK	Black	ER-148	48	30	$110.95
17229-RK	Black	ER-1	71	40	$139.95
17230-RK	Black	ER-184	84	45	$145.95

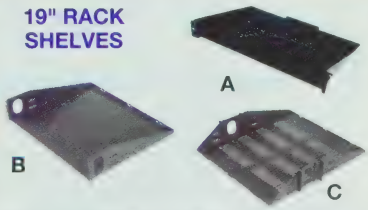
19" HEADEND EXPANSION RAILS

VIDEO MOUNT PRODUCTS

13ga. Steel Rails and side stabilizing bars to convert Headend rack to 4 posts. Black static resistant Powder Coat finish.
Shipped unassembled with hardware

STOCK#	COLOR	VMP P/N	HEIGHT	WT.	1EA
17231-RK	Black	ER-1-4PKIT	71	25	$82.95
17232-RK	Black	ER-184-4PKIT	84	28	$92.95

19" RACK SHELVES



VIDEO MOUNT PRODUCTS

Black Powder coat finished Steel. Drilled for standard rails. 50lb. MAX Load
17235 Center mount & Vented

STOCK#	PICT.	VMP#	DEPTH	WT.	1EA
31033-RK	A	ER-S1	12"	5	$22.95
17234-RK	B	ER-S2U	14-3/4"	7.5	$29.95
17235-RK	C	ER-S2CM	19	10	$48.95

CABLE BRACKETS

VIDEO MOUNT PRODUCTS

Black, static resistant Powder Coated steel panels for 19" racks or wall brackets. Large slotted metal rings manage all types of cables.Includes 10 & 12-32 Rack Mount Screws.

STOCK#	VMP#	HT.	WT.	1EA
17241-RK	ER-DRCM1	1U	1.2	$17.95
17242-RK	ER-DRCM2	2U	2	$21.95

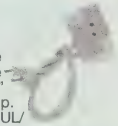
12V G-4 BI-PIN LED LAMPS

Bi-pin bulb replacement assembly features: 14 super brite LEDs,12VAC or DC operation, 55deg. beam angle. Replacement for most G-4 lamps. 9mm dia. X 8mm Steel Pins, plastic body.

Dia.: 22.5mm **T:** 11mm **WT:** .009

STOCK #	DESC.	1EA
17352-OP	Red LED Bi-Pin Lamp	$3.95
17353-OP	Green LED Bi-Pin Lamp	$3.95
17354-OP	Amber LED Bi-Pin Lamp	$3.95
17355-OP	Blue LED Bi-Pin Lamp	$3.95

G-4 BI-PIN SOCKET



G-4 socket for Bi-pin bulbs. For use with halogen, standard and LED type lamps. Ceramic body with 2 corner 1/8" holes for mounting. 6in. high temp. leads. 250VAC/25VDC/2A/100W Max. UL/canada/us/VDE/CE

L.: 1-1/16" **W:** 5/8" **T:** 3/8" **WT:** .02

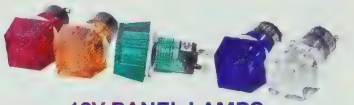
STOCK #	DESC.	1EA
19092-PL	G-4 Bi-Pin Socket	$1.95

G-4 BI-PIN SOCKET

G-4 socket for MR16/11 Bi-pin bulbs. For use with halogen, standard and LED type lamps. Ceramic body with two 3/16in. holes on 1/2in. ctrs. for mounting. 5in. high temp. leads. 250VAC/100W Max. CE listed

Dia: 5/8" **T:** 3/8" **WT:** .02

STOCK #	DESC.	1EA
31095-PL	G-4 Bi-Pin Socket Round	$1.95



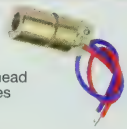
12V PANEL LAMPS

Panel lamps with Non replaceable bulb rated 12V. Tapered square top (.6"sq. X .5" tall). Solder terminals. Mounts in round hole

Mtg. Hole: .6" **L:** 1-1/2" **WT:**.016

STOCK #	DESC.	1EA	10+EA
7117-LA	Red Panel Lamp	$0.95	$0.89
7118-LA	Yellow Panel Lamp	$0.95	$0.89
7119-LA	Green Panel Lamp	$0.95	$0.89
14183-LA	Blue Panel Lamp	$0.95	$0.89
14184-LA	Clear Panel Lamp	$0.95	$0.89

MINI LASER HEAD



<5mw, 635nm Red Laser Diode head for aiming, alignment or other uses
3mm Aperure
0.8m Radians Divergence
3.0VDC operation, Forward current <40mA.
5V max Reverse Voltage.
6mm Dia. Brass Body, 2in Leads

Dia: 6mm **L:** 15mm **WT:** .001

STOCK #	DESC.	1EA
19566-LZ	Mini Red LASER Head	$2.25

MINI LAMPS

Grain-of-Wheat" lamps, Only 1/8"dia X 1/4". 10" leads. Ideal for hobbists! Use in model cars, boats, trains etc..

L: 1/4" **Dia:** 1/8" **WT:** .001

STOCK #	DESC.	1EA	10+EA
8980-LA	1.5V Mini Lamp	$0.59	$0.49
8981-LA	3.0V Mini Lamp	$0.59	$0.49
8982-LA	6.0V Mini Lamp	$0.59	$0.49
8983-LA	12V Mini Lamp	$0.59	$0.49

72 LUMEN LED MODULE

12V, +-.5V DC input Only.

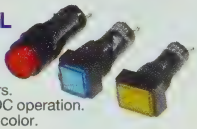
White LED light engine features: 4 high lumen LEDs in module. 120 deg. beam angle. Dual 1.5" leads for connecting multiple Modules in parallel. CE /RoHS
Current: 80mA (.080A)/module
Color Temp:~5000 to 6500 72 Lumens/Module
Steel case, Peel-n-stick backer, clear epoxy potting.

L.: 1-7/16" **W:** 1-3/4" **T:** 3/16" **WT:** .025

STOCK #	DESC.	1EA
19445-OP	White 72 lm Light Module	$2.95

THOUSANDS MORE ITEMS ON MPJA.COM

LED12VDC PANEL INDICATORS



Panel mount LED indicators.
Internal resistor for 3-12VDC operation.
Internal LED matches lens color.
Solder terminals
Lens Dimn. shown, O/A size 2mm larger

Mtg Hole: 8/10/12mm **L:** 1-3/8" **WT:** .005

Round

STOCK #	DESC.	1EA	10+EA
16964-LE	10mm Amber Indicator	$0.89	$0.79
16982-LE	12mm Blue Indicator	$0.99	$0.89

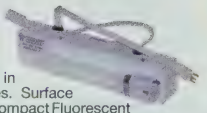
Square

STOCK #	DESC.	1EA	10+EA
17306-LE	8mm Sq. Blue Indicator	$0.79	$0.69
17307-LE	8mm Sq. Green Indicator	$0.79	$0.69
16965-LE	10mm Sq. Red Indicator	$0.89	$0.79
16966-LE	10mm Sq. Blue Indicator	$0.89	$0.79
16968-LE	10mm Sq. Amber Indicator	$0.89	$0.79
16986-LE	12mm Sq. Blue Indicator	$0.99	$0.89
16987-LE	12mm Sq. Green Indicator	$0.99	$0.89
16988-LE	12mm Sq. Amber Indicator	$0.99	$0.89

Rectanglar

STOCK #	DESC.	1EA	10+EA
17309-LE	8x11 Rect. Red Indicator	$0.79	$0.69
17310-LE	8x11 Rect. Blue Indicator	$0.79	$0.69
17312-LE	8x11 Rect. Amber Indicator	$0.79	$0.69
16970-LE	10x14 Rect. Blue Indicator	$0.89	$0.79
16971-LE	10x14 Rect. Green Indicator	$0.89	$0.79
16989-LE	12x16 Rect. Red Indicator	$0.99	$0.89
16990-LE	12x16 Rect. Blue Indicator	$0.99	$0.89
16991-LE	12x16Rect. Green Indicator	$0.99	$0.89
16992-LE	12x16Rect. Amber Indicator	$0.99	$0.89

LIGHT FIXTURE & LAMP

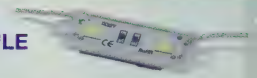


Originally mfg. for use in signage & display cases. Surface mount fixture for PL-S2 Compact Fluorescent Lamps (Includes a 13W PL-S Compact Fluorescent Lamp), 10in. leads with molded 3 pin special connector for "Daisy Chaining" units. 120VAC 60Hz, .35A. UL listed

L: 9-1/8" **H:** 2-3/4" **W:** 2-1/4" **WT:** 1.6

STOCK #	DESC.	1EA
18098-MI	120VAC Compact Fluorescent	$8.95

36 LUMEN LED MODULE



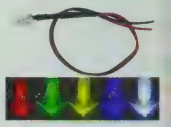
12V, +-.5V DC input Only.

White LED light engine features: 2 high lumen LEDs. 120 deg. beam angle. Dual 1.0" leads for connecting multiple Modules in parallel. CE /RoHS
Current: 40mA (.040A)/module
Color Temp:~5000 to 6500 36Lumens/Module
White Plastic case, Peel-n-stick backer, clear epoxy potting.

L.: 1-7/8" **W:** 5/8" **T:** 3/8" **WT:** .02

STOCK #	DESC.	1EA
31368-OP	White 36 lm Light Module	$0.99

12V LED LAMPS



LED Panel lamps with Internal resitor for 20mA @12VDC, 20deg. beam angle. Water clear, non diffused case. 8in. leads

Dia.: 5mm **WT:** .005

STOCK #	DESC.	1EA
30124-LA	Red 4Kmcd LED Lamp	$0.75
30125-LA	Green 12Kmcd LED Lamp	$0.75
30126-LA	Yellow 4Kmcd LED Lamp	$0.75
30127-LA	Blue 5Kmcd LED Lamp	$0.75
30128-LA	White 16K mcd LED Lamp	$0.75

22MM 12V PANEL INDICATORS

Panel mounted LED lighted industrial indicators rated 12VAC/DC +-20%, <20mA. Shielded screw terminals. Mounts in 22mm Hole. CE listed.

Dia: 1-1/8in. **L:** 2-5/8in. **WT:** .05

STOCK #	DESC.	1EA
31087-LE	Red Panel Indicator	$2.95
31088-LE	Green Panel Indicator	$2.95
31089-LE	Yellow Panel Indicator	$2.95

12V PANEL ALARM

Panel mounted lighted annuncator rated 12VAC/DC +-20%, <20mA. 80db Beep tone with Red LEDs. Beep/Flash rate ~1CPS. Shielded screw terminals. Mounts in 22mm Hole. CE listed.

Dia: 1-1/8in. **L:** 2-5/8in. **WT:** .05

STOCK #	DESC.	1EA
30472-SU	Red Panel AlarmFlash /Beep	$4.95

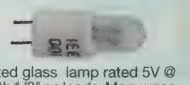
MINI LAMPS

Only 3/16"[Dia] X 7/16". Rated 6V @ 70mA, 10" red & black leads. Many uses for hobbists! Use in model cars. Sold in packs of 2.

L: 7/16" **Dia:** 3/16" **WT:** .001

STOCK #	DESC.	1PR
6695-LA	Two 6V Mini Lamps	$0.80

MINI LITE BULB



IEE 7328-14 PC mount, frosted glass lamp rated 5V @ 182mA, White plastic base with 1/8" pc leads. Many uses for hobbists.

Dia: 1/4" **H:** 5/8" **WT:** .0015

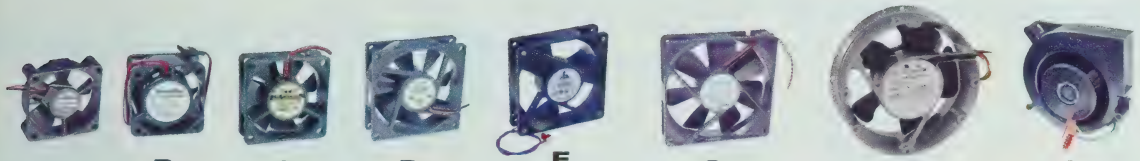
STOCK #	DESC.	1EA
7932-LA	Mini 5V Bulb	$0.05

NEW FANS
THERMOCOOL AC FANS

A B C D E F G H I

UL/TUV/CE RoHS Compliant

STOCK#	FIG.	MFG.	P/N	DIMN.	VOLTS/AMP	CFM	NOISE	BEARING	CONNECT	APPROVAL	WT	1EA	12+EA
17771-FN	A	THERMOCOOL	G8025HAS	3-1/8 SQ X 1	125AC/.13	23	30	SLV.	WIRE	uULc/TUV/CE	.6	$9.95	$8.95
17772-FN	B	THERMOCOOL	G8038HAS	3-1/8 SQ X 1-1/2	125AC/.14	28	33	SLV.	WIRE	uULc/TUV/CE	.6	$14.95	$12.95
17773-FN	C	THERMOCOOL	G9225HAS	3-5/8 SQ X 1	125AC/.14	34	40	SLV.	TERMINALS	uULc/TUV/CE	.5	$9.95	$8.95
17774-FN	D	THERMOCOOL	G12025HAS	4-11/16 SQ X 1	125AC/.20	66	42	SLV.	TERMINALS	uULc/TUV/CE	.75	$9.95	$8.95
17775-FN	E	THERMOCOOL	G12038HAS	4-11/16 SQ X 1-1/2	125AC/.28	95	48	SLV.	TERMINALS	uULc/TUV/CE	1.1	$12.95	$10.95
17776-FN	E	THERMOCOOL	G12038MAB	4-11/16 SQ X 1-1/2	125AC/.22	85	44	BALL	TERMINALS	uULc/TUV/CE	1	$15.95	$12.95
17777-FN	E	THERMOCOOL	G12038MAS	4-11/16 SQ X 1-1/2	125AC/.22	85	44	SLV.	TERMINALS	uULc/TUV/CE	1.1	$11.95	$9.95
17778-FN	F	THERMOCOOL	G13538HAS	5-5/16 SQ X 1-1/2	125AC/.34	122	53	SLV	WIRE	uULc/TUV/CE	1.2	$14.95	$12.95
17779-FN	G	THERMOCOOL	G15050HAS	6 SQ X 2	125AC/.40	198	58	SLV	WIRE	uULc/TUV/CE	1.9	$22.95	$19.95
17780-FN	H	THERMOCOOL	G17050HASB	6-3/4 RND X 2	125AC/.40	198	59	BALL	TERMINALS	uULc/TUV/CE	1.8	$22.95	$19.95
17781-FN	I	THERMOCOOL	G17050HAST	6-3/4 X 6 X 2	125AC/.40	198	59	BALL	TERMINALS	uULc/TUV/CE	1.9	$22.95	$19.95



A B C D E G H J

MISC. DC FANS

PICTURES ARE REPRESENTIVE OF THE STYLE AND ARE NOT EXACT

VISIT WWW.MPJA.COM, ENTER STOCK # TO SEE ACTUAL PICTURE

STOCK#	FIG.	MFG.	P/N	DIMN.	VOLTS/AMP	CFM	NOISE	BEARING	CONNECT	APPROVAL	WT	1EA	12+EA
31852-FN	A	SUNON	KDE0504PFB1-8	1-9/16" X 3/8"	5DC/.14	7	25.5	BALL	37" LEADS	ULCAN/us	.04	$2.49	----
31854-FN	C	NMB-MAT	1604KL-01W-B50	1-9/16" X 3/8"	5DC/.21	6	29	BALL	37" LEADS	UL/CSA/VDE/CE	.03	$2.95	----
31853-FN	B	SUNON	KDE050PFV2	2" SQ X 3/8"	5DC/.16	11	<35	VAPO	4" LEADS	ULCAN/us/ TUV	.06	$2.95	----
18043-FN	D	COMAIR	ST05B3	3-1/8" SQ X 1-1/4"	5DC/.58	34	41	HYD	9" LEADS	UL/CSA	.42	$5.95	----
18488-FN	B	DELTA	1AFB0312MD	1-3/16" SQ X 3/8"	12DC/.15	3.5	25	BALL	3" LEADS	UL/CSA/VDE/CE	.02	$3.95	----
19010-FN	C	SUNON	KDE1205PHV3-MS.AF.GN	1-15/16 SQ" X9/16"	12DC.04	10	22	VAPO	5" LEADS	ULCAN/us/ TUV	.08	$1.95	----
12773-FN	A	T&T	MW-510H12C	2" SQ X 3/8"	12DC/.14	9	27	BALL	10" LEADS	UL/TUV/CE	.05	$1.65	$1.49
17526-FN	C	JAMICON	JF0625S1L	2-3/8" SQ X 1"	12DC/.17	17	28	SLV	4" LEADS	ULCAN/TUV	.13	$2.95	$2.50
19251-FN		JAPAN SERVO	TUDC12Z4	2-3/8" SQ X 1"	12DC/.14	19	NA	BALL	11" LEADS	---	.16	$2.95	----
19270-FN	B	SANYO	109R0612F415	2-3/8" SQ X 1"	12DC/.09	15.5	24	BALL	5" LEADS	UL/CSA/VDE	.18	$2.95	----
19389-FN	B	MITSUBISHI	MMF-060DL	2-3/8" SQ X 1"	12DC/.07	NA	NA	BALL	8" LEADS	UL/CSA	.14	$1.95	----
18842-FN	C	DELTA	AFB0812L	3-1/8"SQ X 1"	12DC/.12	27.9	25	BALL	5" LEADS	UL/CSA/VDE/CE	.2	$4.95	----
			IDE Power Connector										
31500-FN	D	NMB	FBA08A12U-1A	3-1/8"SQ X 1"	12DC/.36	46	39	HYD	10" LEADS	UL/CSA	.22	$4.95	$4.49
30243-FN	D	T&T	8025L12SND1	3-1/8"SQ X 1"	12DC/.14	~30	25	BALL	7" LEADS	ULCAN/us/ TUV/CE	.18	$3.95	----
19387-FN	C	DENSITRON	DPF92B012	3-5/8" SQ X 11/16"	12DC/.26	NA	NA	BALL	10" LEADS	---	.42	$5.95	
18049-FN	D	PANASONIC	FBA09A12H	3-5/8" SQ X 1"	12DC/.29	57	35	HYD	9" LEADS	UL/CSA	.22	$5.95	----
19238-FN	D	PANASONIC	FBA09A12V	3-5/8" SQ X 1"	12DC/.4	60	NA	HYD	11" LEADS	---	.22	$4.95	----
16543-FN	D	AVC	C9025S12H	3-5/8" SQ X 1"	12DC/.3	52	34	SLV	6" LEADS	UL/CSA/TUV/CE	.16	$3.95	$3.50
			Stall Sensor Output										
31203-FN	G	SUNON	EEC0251B1-A99	4-11/16" SQ X 1"	12DC/.45	108	44.5	BALL	12" LEADS	CE	.36	$4.95	$3.95(40)
18222-FN	G	JAPAN SERVO	CNDC12Z7RP	4-11/16" SQ X 1-1/2"	12DC/.71	124	49	BALL	10" LEADS	UL/CSA/TUV	.6	$4.95	$3.95 (40)
			Tach Sensor Output										
18221-FN	H	JAPAN SERVO	PADC12X7P	6-3/4" RND. X 2"	12DC/1.9	250	59	BALL	10" LEADS	ULCAN/us/ TUV	1.6	$19.95	$17.95
			Stall Sensor Output										
19005-FN	E	DELTA	EFB1248HHF	4-11/16" SQ X 1-1/4"	48DC/.21	120	NA	BALL	12" LEADS	UL/CSA/VDE/CE	.6	$5.95	----

FAN GUARDS

PICTURES ARE REPRESENTIVE OF THE STYLE AND MAY NOT BE EXACT

STOCK#	FIG.	FAN SIZE	STYLE	MOUNTING	MAT.	FINISH	WT.	1EA	10+EA
18383-FN	A	1-9/16"/40MM	OFFSET	4 CORNERS	STEEL	CHROME	.01	$0.99	$0.89
18384-FN	B	2-3/8"/60MM	OFFSET	4 CORNERS	STEEL	CHROME	.03	$0.99	$0.89
18386-FN	D	3-1/8"/80MM	OFFSET	4 CORNERS	STEEL	CHROME	.04	$1.25	$0.99
18387-FN	E	3-5/8"/90MM	OFFSET	4 CORNERS	STEEL	CHROME	.05	$1.25	$0.99
18388-FN	F	4-11/16"/120MM	OFFSET	4 CORNERS	STEEL	CHROME	.08	$1.39	$1.25
17815-FN	G	5"/127MM	OFFSET	4 CORNERS	STEEL	CHROME	.13	$1.29	$0.99
18390-FN	H	6-3/4"/172MM	OFFSET	4 CORNERS	STEEL	CHROME	.1	$1.50	$1.29

5VDC 2-3/8" SERVER FAN

MFG: ELINA
P/N: HDF6015L-05HB-50A
Volts: 512VDC
Current: .36A
CFM: 18
Plastic blades & housing. 32db noise.Ball bearings. 11" leads. UL/us/canada/TUV listed
SQ: 2-3/8" **T:** 5/8" **WT:** .22

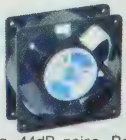
STOCK #	DESC.	1EA
31916-FN	5V 2-3/8" Elina Fan	$1.95

3-1/8" 12VDC FAN

MFG: T&T
P/N: 8025L12S ND1
Volts: 12VDC
Current: .14A
CFM: ~30
Plastic blades & housing. 25db noise, 7" leads with 2 socket header connector. UL/canada/us/TUV/CE
SQ: 3-1/8" **T:** 1" **WT:** .18

STOCK #	DESC.	1EA
30243-FN	12V 3-1/8" T&T Fan/Header	$3.95

4-11/16" 230VAC FAN



MFG: COMAIR/ROTRON
P/N: GAA1238-230BB
Volts: 230VAC
Current: .2A
CFM: 111
Plastic blades with metal housing. 44dB noise. Ball bearings. Solder/Fan Plug. UL/canada/usa/TUV/CE listed.
SQ: 4-11/16" **T:** 1-1/2" **WT:** 1.2

STOCK #	DESC.	1EA
18834-FN	230VAC Comair Fan	$12.95

12VDC SERVER FANS

MFG: AVC for H/P
P/N: DB0404812U
Volts: 12 VDC
Current: 1.14A/subassembly
CFM: 25+/subassembly
Server fan unit has 4 removable dual 1-9/16" (40mm) 12V fan subassemblies. Each subassembly consists of a 3 blade fan mechanically mounted in series with a 5 blade fan and cannot be separated. Both sets of fan leads brought out to a connector (NO Mate available). 2" leads. All fans have stall sensor output. UL/CSA/TUV/CE listed
L: 7-3/4" **H:** 1-9/16" (40mm) **D:** 3-1/8" **WT:** .83

STOCK #	DESC.	1EA
15839-FN	Server 12V Fan Assembly	$9.95

230VAC FAN

MFG: NIDEC
P/N: TA0600-A32013-10
Voltage: 230VAC
Current: .12A
CFM: 135
Metal body fan with Plastic blades.
64 db noise, Ball bearings. Solderable fan cord connector mounted to fan. UL/CSA listed
L: 6-3/4" **W:** 5-7/8" **T:** 1-1/2" **WT:** 1.4

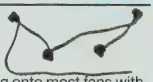
STOCK #	DESC.	1EA
31415-FN	230VAC Nidex Fan	$19.95

2-3/8" 12VDC FAN

MFG: DELTA
P/N: TFB0612GHE-4A58
Voltage: 12VDC
Current: 1.68A
CFM: 64
INTEL SR2400, Server fan with Plastic housing & blades. 64 db noise, Ball bearings. Sensor output. 6Pin connector mounted to fan. UL/us/canada/VDE/CE listed
Pin 1=+12V Fan Pin4= Red to LED
Pin 2= Yellow Sensor Pin 5= Black -12 Fan
Pin 3= Connected to Pin 6 Pin 6= connected to Pin 3
SQ: 2-3/8" **T:** 1-1/2" **WT:** .24

STOCK #	DESC.	1EA
30246-FN	12VDC Delta 2-3/8" Fan	$4.95

FAN CORD FOR 4 FANS



18/2 ZIP Fan cord designed to plug onto most fans with .100in quick connect/solder terminals. Four 90 Deg. angled molded fan plugs. 1st separated from 2nd. by 3-1/4in. of cord, 2nd. from 3rd. by 6-1/2" of cord and 3rd from last by 3-1/4". 12" of pig tail to 1st. fan.
L: 27" **WT:** .08

STOCK #	DESC.	1EA
30347-FN	27" 90 Deg. 4X Fan cord	$1.95

24" STRAIGHT FAN CORD

ZIP Fan cord designed to plug onto most fans with .100in quick connect/solder terminals. Straight molded fan plug on one end.
L: 24" **WT:** .04

STOCK #	DESC.	1EA
18833-FN	24" Straight Fan Cord	$1.49

FAN CORD FOR 3 FANS

18/2 ZIP Fan cord designed to plug onto most fans with .100in quick connect/solder terminals. Three 90 Deg. angled molded fan plugs separated by 7-1/2 in. of cord. 8in. of pig tail to 1st. fan.
L: 24" **WT:** .06

STOCK #	DESC.	1EA
18057-FN	24" 90 Deg. 3X Fan Cord	$2.95

2-3/8" 12VDC FAN

MFG: MITSUBISHI
P/N: MMF-060DL
Voltage: 12VDC
Current: .07A
CFM: NA
Plastic housing and blades.
8" leads. Ball bearings. UL/CSA listed
SQ: 2-3/8" **T:** 1" **WT:** .14

STOCK #	DESC.	1EA
19389-FN	12VDC 2-3/8" Mitsubishi Fan	$1.95

1-5/8" 5VDC FAN

MFG: ELINA
P/N: HDF4012L-05HB
Voltage: 5VDC
Current: 240mA
CFM: 8
Plastic housing & blades. 28 db noise, Ball bearing. 11" leads. UL/us/canada listed.
SQ: 1-5/8" **T:** 1/2" **WT:** .07

STOCK #	DESC.	1EA
31414-FN	5VDC Elina 1-5/8" Fan	$1.95

1-3/8" 12VDC BLOWER

MFG: DELTA
P/N: BFB03512HA
Voltage: 12VDC
Current: .11mA
CFM: 1.8
Micro Blower with Plastic housing & blades. 29db noise, Ball bearings. 1/8" foam pad glued on back. Peel-N-Stick for attachment. 5in Wire leads with super micro connector. UL/CSA/VDE/CE listed
SQ: 1-3/8" **T:** 1/2" **WT:** .02

STOCK #	DESC.	1EA
30324-FN	12VDC Delta1-3/8" Blower	$2.95

12VDC 4-11/16" FAN

MFG: SUNON
P/N: EEC0251B1-0000-A99
Volts: 12VDC
Current: .451A
CFM: 108
Plastic blades & housing.
44.5 db noise, Ball bearings. 12" leads.
SQ: 4-11/16" **T:** 1" **WT:** .36

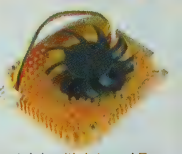
STOCK #	DESC.	1EA
31203-FN	12V 4-11/16" Sunon Fan	$4.95

GIANT 12VDC FAN

MFG: COOLMASTER
P/N: A23030-10CB-3DN-L1
Voltage: 12VDC
Current: .4A
CFM: 140
Removed from New Equipment. Oval computer case fan with Plastic housing & blades. Tach Output, 23db noise, sleeve bearings. 17in Wire leads with 3 Pin Plug. UL/us/canada/CE listed.
Dia: 200X230mm **T:** 30mm **WT:** .82

STOCK #	DESC.	1EA
30327-FN	RFNE 12VDC 9" Fan	$7.95

VGA CHIPSET COOLER 12VDC



MFG: Thermaltake
P/N: A-1553-2 (OEM Version)
Voltage: 12VDC
Current: .25A
CFM: 10.6
Noise: 21db
Natural Hard Copper, finned heatsink with internal Fan. Designed to cool Tt-G4-VGA or similar graphic chipsets. Stall sensor output.
L: 5/8" **W:** 1-5/16" **T:** 1/2" **WT:** .3

STOCK #	DESC.	1EA
31838-FN	Copper VGA Cooler/Fan12V	$3.95

12V LIGHTED SAFETY SWITCH

SPST, Auto type full toggle with Red LED illuminated toggle handle. Cover must be opened to activate switch. Closing cover forces switch to original position (OFF). This switch has 3 terminals:
+12 for contact
Ground for LED
Contact for Load & LED.
Terminals: .25" Quick connect.
Rated: 25A @ 12VDC
Mounts in 1/2" hole.

WT: .08

STOCK #	DESC.	1+EA
18496-SW	12V Lighted Safety Switch	$2.95

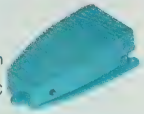
FOOT SWITCH

General use foot switch with metal case, non slip treadle & feet
Contacts: SPST-NO 125/250VAC @ 10A.
Actuation pressure: Approx. 3 lbs.
With 1m pigtail Cord

L: 4" **W:** 2-7/8" **H:** 1-1/8" **WT:** .54

STOCK #	DESC.	1EA
18150-SW	General Use Foot Switch	$6.95

FOOT SWITCH

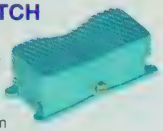


Metal case, Medium duty foot switch for industrial use.
Contacts: SPDT 380VAC/220VDC @ 5A.
Actuation pressure: Approx. 4lbs.
Cord Not Included

L: 5-1/4" **W:** 2-5/8" **H:** 1-5/8" **WT:** .34

STOCK #	DESC.	1EA
18152-SW	Medium Foot Switch	$7.95

ROCKER FOOT SWITCH



Metal case, Rocker action Heavy duty foot switch for industrial use. Momentary in either direction, spring return to center OFF.
Contacts: DPDT Mom-Off-Mom 380VAC/220DC @ 5A
Actuation pressure: Approx. 2.5lbs. either side
Cord Not Included

L: 5-5/8" **W:** 2-3/4" **H:** 2" **WT:** .7

STOCK #	DESC.	1EA
18153-SW	Rocker Foot Switch	$13.95

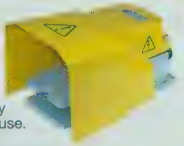
FOOT SWITCH

Metal case, top protected Heavy duty foot switch for industrial use. Pedal protected from dropped material.
Contacts: SPDT 125/180VAC @ 15A. 1/4hp@ 250VAC
Actuation pressure: Approx. 4lbs.
Cord Not Included

L: 7-3/4" **W:** 3-7/8" **H:** 5" **WT:** 1.6

STOCK #	DESC.	1EA
30048-SW	Protected Foot Switch	$19.95

SAFETY FOOT SWITCH



Metal case, enclosed Heavy duty foot switch for industrial use. Pedal protected on 3 sides.
[Contacts:] SPDT 125/480VAC @ 15A. 1/4hp@ 250VAC
[Actuation pressure:] Approx. 4lbs.
Cord Not Included

L: 8-1/8" **W:** 5-7/8" **H:** 4-7/8" **WT:** 2.4

STOCK #	DESC.	1EA
30049-SW	Safety Foot Switch	$24.95

TACTILE PUSHBUTTON SWITCH

Action: SPST-NO
Contacts: 50mA,12VDC
Small P.C. mount pushbutton switch. Distintive "Click" and snap to finger when pressed. .03 Ohm contact resistance max. 250gm activation force
SQ: 12mm **H:** 12mm **WT:** .007

STOCK #	DESC.	1EA	10+EA
30034-SW	White Mini PB Switch	$0.39	$0.35
30035-SW	Blue Mini PB Switch	$0.39	$0.35
30036-SW	Red Mini PB Switch	$0.39	$0.35
30037-SW	Green Mini PB Switch	$0.39	$0.35
30038-SW	Yellow Mini PB Switch	$0.39	$0.35

RT. ANGLE SLIDE SWITCH

P.C. Mount, Vertical slide switch.
Action: 3 position 4 contact
Contacts: 2A@250VAC/4A@120VAC
.187" pin Spacing. UL/CSA listed.
4 Pin switches as 1to2/2to3/3to4

L: 15/16" **W:** 1/2" Body + Act. **H:** 3/8" **WT:** .006

STOCK #	DESC.	1EA
18869-SW	C&K R/Ang. Slide Switch	$0.15

LARGE P/B GAME SWITCH

Lighted, large plastic body, panel mount SPDT push button switches. Mount in a 15/16" hole. 1/4" quick connect terminals. Switch Contacts: 5A@250 VAC. Replaceable wedge base Lamp: rRted 12V @ 3W,

L: 2-1/2" **WT:** .065

STOCK #	DESC.	1EA	20+EA
17052-SW	White Game Switch	$2.95	$2.49

SPST PUSH BUTTON SWITCH

MEC, SPST-NO super small PC board mount switch used as a Limit or sense switches in VCRs, Tape players, etc. 1/8" black plastic push button. Rated: < 10gm activation force, .2VA @ 24V DC.

L: 5/16" **W:** 3/8" **T:** 1/8" **WT:** .001

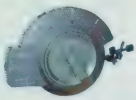
STOCK #	DESC.	1EA	5+EA
15567-SW	MEC P/B Switch	$0.25	$0.20

MINI KEY SWITCH

MFG: SIEMENS
PN: V42266-C4499-A162
Mini SPST Key Switch Rated: .1VA@ 125VAC. 6 Dimple lock with 2 plated brass keys. 90deg. Index, key removable in both positions. ALL KEYED ALIKE. P.C Board mounting. Includes 2 keys. Key removable in both positions.
SQ: 19mm **HT:** 19mm (Ex Pins) **WT:** .04

STOCK #	DESC.	1EA
18071-SW	Mini Key Switch	$3.95

OPTICAL SWITCH



3 way bi-directional optical switch with 3.5mm optical in/outputs. Select from 3 different audio sources, or receivers. Includes TOSLINK to 3.5mm optical adapters.

WT: .23

STOCK #	DESC.	1EA
15189-FO	Fiber Optic Switch	$4.99

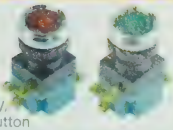
SPDT SLIDE SWITCH

PC mount,super mini slide switch.
Contacts rated .4VA.
Pin Spacing: 2mm.
Sold in Packs of 10pcs.

L: 11/32" **W:** 3/16" **H:** 5/16" Body + Act. **WT:** .009/10

STOCK #	DESC.	1PK	10+PK
18453-SW	Mini Slide Switch	$1.00	$0.80

LIGHTED PUSHBUTTON SWITCH



Lighted Industrial control switch with 1 NC & 1 NO contact. Replaceable 6.3V, 170mA bulb, 3/4in. dia. Button with Chrome plastic bezel 1-3/16in. dia. Switch modules Rated 5A@ 380VAC. Screw terminals. Mounts in 24mm hole. For panels up to 10mm thick

L: 2-1/2"O/A **W:** 1-5/8" **T:** 1" (Body) **WT:** .08

STOCK #	DESC.	1EA
31185-SW	Red Lighted P/B Switch	$3.95
31186-SW	Green Lighted P/B Switch	$3.95

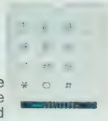
PUSHBUTTON SWITCH

SPST pushbutton switches. Rated 3A@125V/1A @ 250VAC. Solder terminals. Mounts in 15/32" hole. TUV/CE Listed. **Not Lighted**

L: 1-5/8" O/A **DIA:** 21/32" **WT:** .02

STOCK #	BUTTON	DESC.	1EA
18378-SW	Red	On-Off Alternate action	$1.59
18379-SW	Red	Off-(On) Momentary	$1.59
18380-SW	Red	On-(Off) Momentary	$1.59
18381-SW	Green	On-Off Alternate action	$1.59

16 BUTTON X-Y KEY PAD



4 X 4 button keypad & Bezel. White buttons with Gray lettering on a White background. Elastomatric contact pad rated 5mA @ 12VDC. When button is pressed a Row is connected to a Collum. 8 header pins at bottom of back. 4 corner mounting holes.

L: 2-3/4" **W:** 2-9/16" **T:** 1/2" (Body) **WT:** .05

STOCK #	DESC.	1EA
18316-SW	4 X4 X-Y White Keypad	$4.95

VACUUM SWITCH

MFG: GOLDTECH
P/N: PS100-A1310-A002
Range: Fixed, .07Pa/.0025PSI Decreasing
Ports: 1 High/1Low; Barbed for 1/4" or 3/8" ID
Switch: SPDT125VA/120VAC; 3A 120VAC/30VDC
Specifications/Features: Vertical mount vacuum switch for sensing pressure drops across fans, vents, filters, dampers etc. Max pressure: 6Kpa (8.5 PSI). .25" quick connect terminals. Silicone diaphram, PPO Housing. UL/canada/us Listed

H: 3-7/8" **W:** 3-1/8" **T:** 2" **WT:** .17

STOCK #	DESC.	1EA
18257-SW	Vacuum Switch	$8.95

SPST PUSH BUTTON SWITCH

Keyboard/Keypad, SPST-NO push button switch with white .25in. Sq. plastic actuator. PC terminals, can be face plate mounted in .578in. Sq. hole. Contacts rated .1VA.

H: 11/16" Body **W:** 5/8" **L:** 43/64"
Mounting: P.C. Board /Face Plate **WT:** .005

STOCK #	DESC.	1EA	100+EA
18018-SW	Keypad P/B Switch	$0.29	$0.25

FOOT SWITCH

FATAR PS-100 SPST-NO foot switch used with musical keyboards etc. Low current/Voltage "Sustain Pedal" Designed for Casio. Fatar Studios, Korg, & Ensonic etc. Hard plastic with rubber overcoat 6ft. cord with 1/4in. mono Phone plug on end.

W: 3-1/2" **H:** 1-1/2" **D:** 4" **WT:** .6

STOCK #	DESC.	1EA
18029-SW	"Sustain" Switch	$14.95

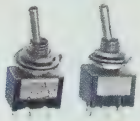
UL MINI TOGGLE SWITCH

UL Listed Mini toggle switch, Mounts in a 1/4" hole with Solder tabs. Rated 5 Amps @ 125VAC.

WT: .02

STOCK #	STYLE	DESC.	1EA	100+EA
5005-SW	SPST	On-None-Off	$0.75	$0.66
5006-SW	SPDT	On-None-On	$0.35	$0.28
16071-SW	SPDT	On-None-(Mom)	$0.58	$0.44
5010-SW	SPDT	On-Off-On	$0.38	$0.29
5009-SW	SPDT	(Mom)-Off-(Mom)	$0.58	$0.44
16072-SW	SPDT	On-Off-(Mom)	$0.58	$0.44
5011-SW	DPDT	On-None-On	$0.41	$0.30
16073-SW	DPDT	On-None- (Mom)	$0.69	$0.52
5014-SW	DPDT	On-Off-On	$0.46	$0.35
16074-SW	DPDT	On-Off-(Mom)	$0.69	$0.52
5016-SW	DPDT	(Mom)-Off-(Mom)	$0.69	$0.52

MINI TOGGLE SWITCH



Mini toggle switch, Mounts in a 1/4" hole with Solder tabs. Rated 5 Amps @ 125VAC.

WT: .02

STOCK #	STYLE	DESC.	1EA	100+EA
16075-SW	3PDT	On-None-On	$0.74	$0.55
16076-SW	3PDT	On-Off-On	$0.88	$0.66
16077-SW	4PDT	On-None-On	$1.42	$1.07
16078-SW	4PDT	On-Off-On	$1.75	$1.31

UL SUB-MINI TOGGLE SWITCH

UL Listed Sub-Mini toggle switch, Mounts in a 1/8" hole with Solder tabs. Rated 1 Amp @ 250VAC.

WT: .02

STOCK #	STYLE	DESC.	1EA	200+EA
16110-SW	SPST	On-Off	$0.45	$0.35
16111-SW	SPDT	On-None-On	$0.49	$0.39
16112-SW	SPDT	On-Off-On	$0.59	$0.49

SUB-MINI TOGGLE SWITCH

Sub-Mini toggle switch, Mounts in a 1/8" hole with Solder tabs. Rated 1 Amps @ 250VAC. TUV Listed

WT: .02

STOCK #	STYLE	DESC.	1EA	100+EA
18398-SW	SPST	On-Off	$0.75	$0.60
18677-SW	SPDT	On-None-On	$0.43	$0.32
18175-SW	DPDT	On-None-Off	$0.75	$0.60
18676-SW	DPDT	On-Off-On	$0.72	$0.54

LIGHTED ROCKER SWITCH

Lighted, snap-in panel mount, SPST Rocker switch. Rated: 20A @ 12VDC. translucent blue Bezel with dual LED lighting. .187" quick connect terminals for contacts, 6in. leads/resistor for LEDs. 20.2mm mounting hole.UL/usa/c

DIA: 29/32"OA **L:** 1-5/32" **WT:** .02

STOCK #	DESC.	1EA	50EA
19321-SW	Lighted Rocker Switch	$1.95	$1.75

LARGE PUSHBUTTON SWITCH

SPST-Normally open, Full size, metal body, Pushbutton switch, Mounts in a 3/4" hole. Rated 2A @ 250VAC/4A @ 125VAC. Screw Terminals.

Dia: 7/8" **L:** 1" **Mtg.:** 3/4" hole **WT:** .05

STOCK #	DESC.	1EA	10+EA
16093-SW	Push Button Switch	$2.02	$1.77

FULL SIZE 15A TOGGLE SWITCH

Standard toggle switches, Mounts in a 1/2" hole. Rated: 10 Amps @ 250VAC. 15A @125VAC. Screw terminals.

WT: .03

STOCK #	STYLE	DESC.	1EA	100+EA
16081-SW	SPDT	On-None-On	$0.88	$0.66
16082-SW	SPDT	On-Off-On	$0.95	$0.71
16083-SW	SPDT	On-None-(Mom)	$1.05	$0.79
16084-SW	SPDT	On-Off-(Mom)	$1.05	$0.79
16085-SW	SPDT	(Mom)-Off-(Mom)	$1.05	$0.79
16086-SW	DPDT	On-None-On	$1.24	$0.93
16087-SW	DPDT	On-Off-On	$1.24	$0.93
16088-SW	DPDT	On-None-(Mom)	$1.49	$1.12
16089-SW	DPDT	On-Off-(Mom)	$1.49	$1.12
16090-SW	DPDT	(Mom)-Off-(Mom)	$1.49	$1.12

FULL SIZE 15A TOGGLE SWITCH

.25"Quick Connect terminals.

Standard toggle switches, Mounts in a 15/32" hole. Rated: 10 Amps @ 250VAC. 15A @125VAC.

WT: .03

STOCK #	STYLE	DESC.	1EA
18371-SW	SPDT	On-None-On	$1.95
18372-SW	SPDT	(Mom)-Off-(Mom)	$1.95
18373-SW	DPDT	On-None-On	$1.95
18374-SW	DPDT	On-Off-On	$1.95
18375-SW	DPDT	(Mom)-Off-(Mom)	$1.95

HEAVY DUTY 20A TOGGLE SWITCHES

Standard toggle switches, Mounts in a 1/2" hole. Rated: 15 Amps @ 250VAC. 20A @125VAC. Screw terminals.

WT: .03

STOCK #	STYLE	DESC.	1EA	100+EA
12216-SW	SPST	On-Off	$0.95	$0.89
12217-SW	SPDT	On-On	$1.15	$0.90
12218-SW	SPDT	On-Off-On	$1.50	$1.22
12219-SW	DPST	On-Off	$1.10	$0.94
12220-SW	DPDT	On-On	$1.80	$1.44
12221-SW	DPDT	On-Off-On	$1.95	$1.56

MINI TOGGLE SWITCH WITH FULL TOGGLE

Mini toggle switches with full sized toggle actuator. Mounts in a 15/32" hole. Rated: 6A @125V/3A@250VAC. UL Listed. Solder terminals.

WT: .03

STOCK #	STYLE	DESC.	1EA
18376-SW	SPDT	On-None-On	$1.49
18377-SW	SPDT	On-Off-On	$1.49

FULL TOGGLE WATERPROOF BOOT

Molded rubber toggle boot with molded in nut. For full sized toggle switches16081-16090 & 12216-12221

Thread: M12X0.75 **WT:** .009

STOCK #	DESC.	1EA	10EA
16312-SW	Full Toggle Boot	$2.49	$2.25

DPDT PUSH BUTTON SWITCH

Right angle PC mount, DPDT Alternate action (Push On/Push Off) push button switch with black .25in. Dia. plastic actuator. Contacts rated .4VA. Pin Spacing: .125" Row Spacing .087"

Mounting: P.C. Board **L:** 1-1/8" O/A **WT:** .005

STOCK #	DESC.	1EA	100+EA
18017-SW	Rt. Ang. P/B Switch	$0.29	$0.25

PUSH BUTTON SWITCH

Mini push button switch, Momentary, Mounts in a 1/4" hole with Solder tabs. Rated 3 Amps @ 125VAC.

WT: .01

STOCK #	STYLE	DESC.	1EA	100+EA
5019-SW	SPST	Normally Open Red	$0.29	$0.26
5020-SW	SPST	Normally Closed Blk	$0.29	$0.26

FULL SIZE TOGGLE SAFETY COVERS

Plastic, Snap action safety covers for standard (1/2" Dia.) sized toggle switches. Cover must be opened to activate switch. Closing cover forces switch to original position. **WT:** .02

STOCK #	DESC.	1EA	10+EA
16100-SW	Red Safety Cover	$0.69	$0.59
16101-SW	Green Safety Cover	$0.69	$0.59
16102-SW	Blue Safety Cover	$0.69	$0.59
16103-SW	Yellow Safety Cover	$0.69	$0.59
16104-SW	Purple Safety Cover	$0.69	$0.59
16105-SW	Black Safety Cover	$0.69	$0.59
16106-SW	Clear Safety Cover	$0.69	$0.59
16107-SW	Chrome Safety Cover	$0.69	$0.59

MISC. TOGGLE SWITCHES

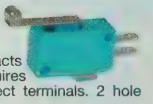
5002-SW 5001-SW 5004-SW 12223-SW

Full size toggle switch, Amp Ratings are @ 125VAC. 5001: Wire leads 5002: Solder tab 5004 & 12223: Screw

Mtg.: 1/2" hole **WT:** .07

STOCK #	STYLE	DESC.	AMP	1EA	100+EA
5002-SW	SPST	On-None-Off	4	$0.75	$0.65
5001-SW	SPST	On-None-Off	6	$1.25	$1.00
5004-SW	DPDT	On-Off-On	10	$1.95	$1.75
12223-SW	SPST	On-None-Off	10	$1.25	$0.96

LEVER/ROLLER SNAP SWITCH

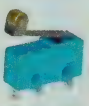


SPDT Lever/roller switch. Contacts rated: 5A @ 250VAC 1" lever requires 35gm force. .187" quick connect terminals. 2 hole mounting. CE Listed.

L: 1-1/8" (body) **W:** 5/8" **T:** 3/8" **WT:** .015

STOCK #	DESC.	1EA	50EA
16315-SW	Roller Micro Switch	$1.25	$0.99

MINI SNAP SWITCH WITH ROLLER

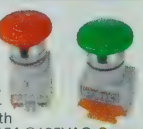


SPDT micro switch with roller. Contacts rated 3A @ 125/250VAC. 55gm actuation force. Solder terminals. 2 mtg. holes. 3/4" lever.

L: 3/4" (body) **W:** 3/8" **T:** 1/4" **WT:** .005

STOCK #	DESC.	1EA	10EA
16317-SW	Mini Snap Switch	$0.89	$0.79

SWITCHBOARD SWITCH



Set of Red & Green DPST switches with 1 NO & 1 NC contact each. Industrial control type switches with 1-5/8in. "Mushroom" dia. Button. Modular construction with changable switch modules Rated 15A @125VAC. Screw terminals. Mounts in 22mm hole.

H: 2-3/4"O/A **L:** 1-7/16" **T:** 1-3/16" **WT:** .18

STOCK #	DESC.	1EA
31295-SW	Red & Green Mushroom Switches	$7.95

BLACK HEATSHRINK TUBING

Polyolefin
Listed dia. before shrinking, 2X min shrink ratio.
Rated 125deg. " C", 600V. UL/CSA Listed.
Available in 4ft lengths or 100ft. Rolls
L: 4ft.

STOCK #	DESC.		WT.	1PC
16325-HS	.8mm/.031"	Shrink	.004	$0.49
16326-HS	1mm/.039"	Shrink	.007	$0.59
16327-HS	2mm/.078"	Shrink	.009	$0.69
16328-HS	3mm/.118"	Shrink	.011	$0.75
16329-HS	6mm/.236"	Shrink	.022	$0.95
16330-HS	9mm/.354"	Shrink	.033	$1.10
16331-HS	12mm/.472"	Shrink	.047	$1.25
16332-HS	18mm/.708"	Shrink	.09	$1.99
16333-HS	25mm/.984"	Shrink	.15	$2.29

HEATSHRINK ROLLS

L: 100ft.Rolls

STOCK #	DESC.		WT.	1ROLL
16334-HS	.8mm/.031"	Shrink	.34	$5.95
16335-HS	1mm/.039"	Shrink	.4	$5.95
16336-HS	2mm/.078"	Shrink	.42	$5.95
16337-HS	3mm/.118"	Shrink	.5	$6.69
16338-HS	6mm/.236"	Shrink	.74	$8.83
16339-HS	9mm/.354"	Shrink	1.1	$10.66
16340-HS	12mm/.472"	Shrink	1.4	$12.96
16341-HS	18mm/.708"	Shrink	2.6	$24.95
16342-HS	25mm/.984"	Shrink	3.6	$48.17

COLOR HEATSHRINK ASSORTMENT

154 pc. of 4in. Shrink tubing in assorted colors. Flexable polyolefin rated for 135 deg. "C" Listed dia. before shrinking,
1/16" 56pcs. 3/32" 35pcs.
1/8" 28pcs. 3/16" 18pcs.
1/4" 9pcs. 3/8" 8pcs.
Includes hinged plastic box with latches

WT: .4

STOCK #	DESC.	1EA	12+EA
16481-HS	Color Shrink Kit	$12.95	$10.95

BLACK HEATSHRINK ASSORTMENT

154 pc. of 4in. Shrink tubing. Flexable polyolefin rated for 135 deg. "C". Listed dia. before shrinking,
1/16" 56pcs. 3/32" 35pcs.
1/8" 28pcs. 3/16" 18pcs.
1/4" 9pcs. 3/8" 8pcs.
Includes hinged plastic box with latches

WT: .4

STOCK #	DESC.	1EA	12+EA
16482-HS	Black Shrink Kit	$12.95	$10.95

HEATSHRINK MARKER ASSORTMENT

360 pc. of 1/2in. long Shrink tubing, 300 black + 60 un-numbered Colored pcs.
Flexable black polyolefin rated for 135 deg. "C". Listed dia. before shrinking, Numbered 0-9. In the following tubing sizes
1/8" 3/16"
1/4" 3/8"
1/2"
Includes hinged plastic box.

WT: .4

STOCK #	DESC.	1EA	12+EA
16483-HS	Heatshrink Marker Kit	$12.95	$10.95

COLOR HEATSHRINK TUBING

Polyolefin
(Clear-CYG-KYNAR)
Listed dia. before shrinking,
2X min shrink ratio.
Rated 125deg. " C", 600V.
Available in 4ft lengths Only
UL/CSA Listed

RED HEATSHRINK

L: 4ft.

STOCK #		DESC.	WT.	1PC
16601-HS	3/64	Red Shrink	.004	$0.49
16602-HS	1/16	Red Shrink	.007	$0.59
16603-HS	3/32	Red Shrink	.009	$0.69
16604-HS	1/8	Red Shrink	.011	$0.75
16605-HS	1/4	Red Shrink	.022	$0.95
16606-HS	3/8	Red Shrink	.033	$1.10
16607-HS	1/2	Red Shrink	.047	$1.25
16608-HS	3/4	Red Shrink	.09	$1.99
16609-HS	1	Red Shrink	.15	$2.29

BLUE HEATSHRINK

L: 4ft.

STOCK #		DESC.	WT.	1PC
16611-HS	3/64	Blue Shrink	.004	$0.49
16612-HS	1/16	Blue Shrink	.007	$0.59
16613-HS	3/32	Blue Shrink	.009	$0.69
16614-HS	1/8	Blue Shrink	.011	$0.75
16615-HS	1/4	Blue Shrink	.022	$0.95
16616-HS	3/8	Blue Shrink	.033	$1.10
16617-HS	1/2	Blue Shrink	.047	$1.25
16618-HS	3/4	Blue Shrink	.09	$1.99
16619-HS	1	Blue Shrink	.15	$2.29

YELLOW HEATSHRINK

L: 4ft.

STOCK #		DESC.	WT.	1PC
16621-HS	3/64	Yellow Shrink	.004	$0.49
16622-HS	1/16	Yellow Shrink	.007	$0.59
16623-HS	3/32	Yellow Shrink	.009	$0.69
16624-HS	1/8	Yellow Shrink	.011	$0.75
16625-HS	1/4	Yellow Shrink	.022	$0.95
16626-HS	3/8	Yellow Shrink	.033	$1.10
16627-HS	1/2	Yellow Shrink	.047	$1.25
16628-HS	3/4	Yellow Shrink	.09	$1.99
16629-HS	1	Yellow Shrink	.15	$2.29

CLEAR HEATSHRINK

CYG-KYNAR

L: 4ft.

STOCK #		DESC.	WT.	1PC
16631-HS	3/64	Clear Shrink	.004	$0.49
16632-HS	1/16	Clear Shrink	.007	$0.59
16633-HS	3/32	Clear Shrink	.009	$0.69
16634-HS	1/8	Clear Shrink	.011	$0.75
16635-HS	1/4	Clear Shrink	.022	$0.95
16636-HS	3/8	Clear Shrink	.033	$1.10
16637-HS	1/2	Clear Shrink	.047	$1.25
16638-HS	3/4	Clear Shrink	.09	$1.99
16639-HS	1	Clear Shrink	.15	$2.29

GREEN HEATSHRINK

L: 4ft.

STOCK #		DESC.	WT.	1PC
16641-HS	3/64	Green Shrink	.004	$0.49
16642-HS	1/16	Green Shrink	.007	$0.59
16643-HS	3/32	Green Shrink	.009	$0.69
16644-HS	1/8	Green Shrink	.011	$0.75
16645-HS	1/4	Green Shrink	.022	$0.95
16646-HS	3/8	Green Shrink	.033	$1.10
16647-HS	1/2	Green Shrink	.047	$1.25
16648-HS	3/4	Green Shrink	.09	$1.99
16649-HS	1	Green Shrink	.15	$2.29

WHITE HEATSHRINK

L: 4ft.

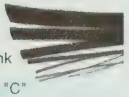
STOCK #		DESC.	WT.	1PC
16651-HS	3/64	White Shrink	.004	$0.49
16652-HS	1/16	White Shrink	.007	$0.59
16653-HS	3/32	White Shrink	.009	$0.69
16654-HS	1/8	White Shrink	.011	$0.75
16655-HS	1/4	White Shrink	.022	$0.95
16656-HS	3/8	White Shrink	.033	$1.10
16657-HS	1/2	White Shrink	.047	$1.25
16658-HS	3/4	White Shrink	.09	$1.99
16659-HS	1	White Shrink	.15	$2.29

VIOLET HEATSHRINK

L: 4ft.

STOCK #		DESC.	WT.	1PC
16661-HS	3/64	Violet Shrink	.004	$0.49
16662-HS	1/16	Violet Shrink	.007	$0.59
16663-HS	3/32	Violet Shrink	.009	$0.69
16664-HS	1/8	Violet Shrink	.011	$0.75
16665-HS	1/4	Violet Shrink	.022	$0.95
16666-HS	3/8	Violet Shrink	.033	$1.10
16667-HS	1/2	Violet Shrink	.047	$1.25
16668-HS	3/4	Violet Shrink	.09	$1.99
16669-HS	1	Violet Shrink	.15	$2.29

DUAL WALL HEATSHRINK



4ft. long black, adhesive lined shrink tubing.
Flexable polyolefin rated for 135 deg. "C"
Listed dia. before shrinking,
L: 4ft.

STOCK #		DESC.	WT.	1PC
16674-HS	1/8	Dual Wall Shrink	.015	$2.95
16673-HS	3/16	Dual Wall Shrink	.017	$3.95
16675-HS	1/4	Dual Wall Shrink	.025	$4.95
16676-HS	3/8	Dual Wall Shrink	.041	$6.95
16677-HS	1/2	Dual Wall Shrink	.055	$7.95
16678-HS	3/4	Dual Wall Shrink	.12	$9.95
16679-HS	1	Dual Wall Shrink	.2	$12.95

DUAL WALL HEATSHRINK ASSORTMENT

37 pc. of 4in. long black, adhesive lined shrink tubing.
Flexable polyolefin rated for 135 deg. "C" Listed dia. before shrinking,
1/8" 12pcs. 1/4" 10pcs.
3/8" 6pcs. 1/2" 4pcs.
3/4" 3pcs. 1" 2pcs.
Includes hinged plastic box with latches

WT: .52

STOCK #	DESC.	1EA	12+EA
16484-HS	Dual Wall Shrink Kit	$16.95	$14.95

6" BLACK HEATSHRINK ASSORTMENT

24 pc. of 6in. long Black Shrink tubing in assorted Dia. Flexable polyolefin rated for 125 deg. "C"/ 600V. Listed dia. before shrinking. 4 pcs. each of following sizes: 3/32", 1/8", 3/16", 1/4", 3/8" &1/2"

L: 6" WT: .2

STOCK #	DESC.	1EA
16830-HS	Black 6" long Shrink Bagged	$3.95

6" COLOR 1/8"HEATSHRINK ASSORTMENT

10 pc. of 6in. long X 1/8" Dia. Shrink tubing in assorted colors. Flexable polyolefin rated for 125 deg. "C"/600V

Black	2pcs.	Blue	1pc.	Yellow	1pc.
Clear	2pcs.	Green	1pc.		
Red	2pcs.	White	1pc.		

L: 6" WT: .2

STOCK #	DESC.	1EA
16831-HS	Color 1/8" Shrink Bagged	$2.25

6" COLOR 3/16"HEATSHRINK ASSORTMENT

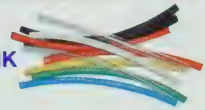
10 pc. of 6in. long X 3/16" Dia. Shrink tubing in assorted colors. Flexable polyolefin rated for 125 deg. "C"/600V

Black	2pcs.	Blue	1pc.	Yellow	1pc.
Clear	2pcs.	Green	1pc.		
Red	2pcs.	White	1pc.		

L: 6" WT: .2

STOCK #	DESC.	1EA
16832-HS	Color 3/16" Shrink Bagged	$2.50

6" COLOR 1/4"HEATSHRINK ASSORTMENT



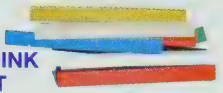
10 pc. of 6in. long X 1/4" Dia. Shrink tubing in assorted colors. Flexable polyolefin rated for 125 deg. "C"/600V

Black	2pcs.	Blue	1pc.	Yellow	1pc.
Clear	2pcs.	Green	1pc.		
Red	2pcs.	White	1pc.		

L: 6" WT: .2

STOCK #	DESC.	1EA
16833-HS	Color 1/4" Shrink Bagged	$2.75

6" COLOR 3/8"HEATSHRINK ASSORTMENT



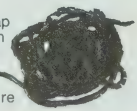
10 pc. of 6in. long X 3/8" Dia. Shrink tubing in assorted colors. Flexable polyolefin rated for 125 deg. "C"/600V

Black	2pcs.	Blue	1pc.	Yellow	1pc.
Clear	2pcs.	Green	1pc.		
Red	2pcs.	White	1pc.		

L: 6" WT: .2

STOCK #	DESC.	1EA
16834-HS	Color 3/8" Shrink Bagged	$2.95

SPIRIAL WRAP

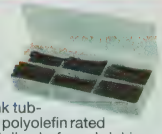


19mm (3/4in.) dia. Flexible Spiral Wrap is used to protect wire & cables in cabinets, bulkheads and to dress up wiring harneses. Wires can exit bundle at any point. 80C max. temperature. For 5/8" to 4" wire bundles

L: 30ft. Dia: 19mm WT: .6

STOCK #	DESC.	1EA
19114-MI	Black Spiral Wrap	$12.95

2-1/2" BLACK HEATSHRINK ASSORTMENT



158 pc. of 2-1/2in. Black Shrink tubing in assorted colors. Flexable polyolefin rated for 125 deg. "C"/600V. Listed dia. before shrinking,

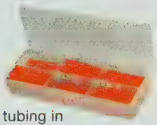
1/16"	60pcs.	1/8"	40pcs.
3/16"	20pcs.	1/4"	18pcs.
3/8"	10pcs.	1/2"	10pcs.

Includes hinged plastic box with latches

L: 2-1/2" WT: .2

STOCK #	DESC.	1EA
16835-HS	2-1/2" Black Shrink Kit	$10.95

2-1/2" RED HEATSHRINK ASSORTMENT



158 pc. of 2-1/2in. Red Shrink tubing in assorted colors. Flexable polyolefin rated for 125 deg. "C"/600V. Listed dia. before shrinking,

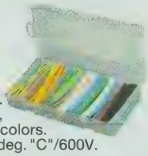
1/16"	60pcs.	1/8"	40pcs.
3/16"	20pcs.	1/4"	18pcs.
3/8"	10pcs.	1/2"	10pcs.

Includes hinged plastic box with latches

L: 2-1/2" WT: .4

STOCK #	DESC.	1EA
16836-HS	2-1/2" Red Shrink Kit	$10.95

4" COLOR HEATSHRINK ASSORTMENT



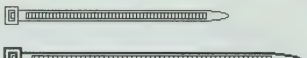
160 pc. of 4in. long shrink tubing. Includes Black, Blue, Clear, Green, Red, White & Yellow colors. Flexable polyolefin rated for 125 deg. "C"/600V. Listed dia. before shrinking,

1/16"	60pcs.	3/32	35pcs.
1/8"	25pcs.	3/16"	20pcs.
1/4"	10pcs.	3/8"	10pcs.

Includes hinged plastic box with latches

L: 4" WT: .4

STOCK #	DESC.	1EA
16843-HS	4" Assort. Color Shrink Kit	$11.95



TY-RAPS

UL listed Natural or Black Nylon ties
Sold in packs of **100**

STOCK #	DESC.		1PK	10+PK
0200-TY	5-1/2" Ty-Rap	.1	$1.70	$1.50
4529-TY	7-1/2"Ty-Rap	.2	$2.80	$2.00
4530-TY	11" Ty-Rap	.5	$5.00	$3.90
11630-TY	4" Black Ty-Rap	.1	$1.30	$1.10
11508-TY	7-1/2" Black Ty-Rap	.2	$2.50	$2.00
11633-TY	11" Black Ty-Rap	.5	$6.90	$5.50
0199-TY	4" Ty-Rap	.1	$1.10	$0.90

NYLON LACING CORD

MIL-T-43435B Type 1, Size 1, Finish B. Braided natural nylon harness lacing cord.

L: 250yrds W: .2" WT: .9

STOCK #	DESC.	1EA
19299-MI	MIL Lacing Tape	$9.95

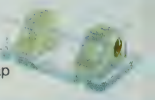
ATC/ATO AUTOMOTIVE FUSE ASSORTMENT

120 auto fuses in plastic storage box
Each kit contains:
20pcs. 5A (Orange)
20pcs. 10A (Red)
20pcs. 15A (Blue)
20pcs. 20A (Yellow)
20pcs. 25A (Clear)
20pcs. 30A (Green)

WT: .5

STOCK #	DESC.	1EA	10+EA
15706-FU	120pc. Fuse Assort.	$13.95	$12.95

HEAVY DUTY FUSE BLOCK

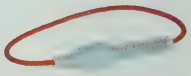


Heavy duty Type ANE (ANL) fuse block. All metal parts are 24K Gold plated. Holds single ANE/ANL fuse up to 500A. Accepts up to 1AWG cable, Set screw clamp, clear snap on cover.

L: 4" W: 1-7/8" H: 1-1/2" WT: .2

STOCK #	DESC.	1EA	5+EA
14948-FH	ANE Fuse Holder	$10.95	$9.95

IN LINE FUSE HOLDER

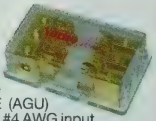


Plastic in line fuse holder. Holds a standard AGC (3AG) 1/4" dia fuse. Overall length is 9-1/2". Ideal for automotive uses etc. Max current is 3A continuous, 5A surge.

L: 9.5" O/A WT: .02

STOCK #	DESC.	1EA	5+EA
4477-FH	InlineFuseholder	$0.75	$0.60

3 POSITION FUSE BLOCK



Distribution block for Type AUE (AGU) fuses. All metal parts are 24K Gold plated. Holds 3 AUE (AGU) fuses up to 80A each. One 3 way #4 AWG input, Three 8AWG output. Inner steps to allow insulation into block. Set screw clamps, clear housing.

L: 4" W: 2-3/8" H: 1-1/4" WT: .6

STOCK #	DESC.	1EA	5+EA
14953-FH	3 Pos. Fused Block	$9.75	$8.95

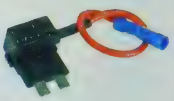
FUSE HOLDER FOR ATQ/ATC BLADE FUSE

Fiber reinforced nylon in line fuse holder with attached cover to keep out dirt, water resistant but not water proof. For full size ATQ type blade fuses. 8" AWG12 wire loop. 30A max. current.

L: 9.5" O/A WT: .1

STOCK #	DESC.	1EA	5+EA
8878-FH	ATQ Blade Fuseholder	$1.65	$1.49

FUSE HOLDER POWER TAP FOR ATC BLADE FUSE



Power Tap, fuse holder, replaces Fuse in Fuse Block to add a fused power tap. Holds original fuse and a second fuse for the tap off. ATQ type blade fuses. 5" AWG16 wire pigtail to female bullet connector.

L: 6.5" O/A WT: .02

STOCK #	DESC.	1EA
30456-FH	ATQ Fuseholder/Tap	$2.95

1A RECTIFIER DIODES

1N4000 series 1 Amp Axial diodes. DO-04 Case
WT: .001

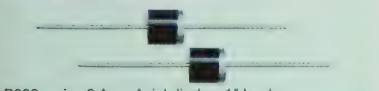
STOCK #	DESC.	PIV	1EA	200EA	1000+EA
5211-DI	1N4001	50	$0.05	$0.04	$0.03
5212-DI	1N4002	100	$0.05	$0.04	$0.03
5213-DI	1N4003	200	$0.06	$0.05	$0.03
5214-DI	1N4004	400	$0.06	$0.05	$0.04
5215-DI	1N4005	600	$0.06	$0.05	$0.04
5216-DI	1N4006	800	$0.06	$0.05	$0.04
5217-DI	1N4007	1000	$0.07	$0.06	$0.04

3A RECTIFIER DIODES

1N5400 series 3 Amp Axial diodes. DO-201AD Case
Dia: .375 WT: .001

STOCK #	DESC.	PIV	1EA	200EA	800+EA
4991-DI	1N5400	50	$0.25	$0.18	$0.16
4992-DI	1N5401	100	.19	.14	.12
4993-DI	1N5402	200	.20	.14	.13
4995-DI	1N5404	400	.21	.15	.13
4996-DI	1N5405	500	.21	.15	.13
4997-DI	1N5406	600	.22	.16	.14
4998-DI	1N5407	800	.23	.16	.15
4999-DI	1N5408	1000	.23	.17	.15

6A RECTIFIER DIODES

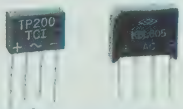


P600 series 6 Amp Axial diodes. 1" leads
Dia: .39" WT: .002

STOCK #	DESC.	PIV	1EA	200EA	800+EA
5218-DI	P600A	50	$0.54	$0.39	$0.35
5219-DI	P600B	100	$0.60	.43	.38
5220-DI	P600D	200	$0.65	.47	.42
5221-DI	P600G	400	$0.70	.51	.45
5222-DI	P600J	600	$0.76	.55	.49
5223-DI	P600K	800	$0.76	.55	.49
5224-DI	P600M	1000	$0.76	.55	.49

IN-LINE BRIDGES

WIRE LEADS



A B

WT: .001

STOCK #	AMP.	PIV	FIG.	1EA	25+EA
5234-BR	2	50	A	$0.44	$0.39
5235-BR	2	400	A	$0.54	$0.48
5236-BR	2	1000	A	$0.62	$0.55
5237-BR	4	50	B	$0.75	$0.67
5238-BR	4	200	B	$0.88	$0.79
5239-BR	4	400	B	$0.98	$0.88
5203-BR	4	1000	B	$1.49	$1.34

6A SQ. BRIDGE

Wire Leads for PC Board Mtg

WT: .001

STOCK #	PIV	DESC.	1EA	25+EA
5241-BR	50	6A Bridge	$0.88	$0.79
5243-BR	1000	6A Bridge	$1.35	$1.21

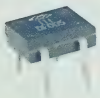
BRIDGE RECTIFIERS

Square package, .250" Quick connect terminals.

WT: .05 15-30A / .1 50A

STOCK #	AMP.	PIV	1EA	25+EA
5244-BR	15	100	$1.91	$1.70
5245-BR	15	400	$2.65	$2.38
5246-BR	15	1000	$3.44	$3.09
5247-BR	25	50	$1.95	$1.75
5248-BR	25	400	$2.70	$2.43
5249-BR	25	1000	$3.49	$3.14
5250-BR	35	50	$2.25	$1.99
5251-BR	35	400	$2.99	$2.69
5252-BR	35	1000	$3.99	$3.59
5254-BR	50	400	$5.75	$4.95
5255-BR	50	1000	$6.45	$5.95

1A MINI DIP BRIDGES



4 pin Mini DIP Package for socket or PC board mounting

WT: .001

STOCK #	PIV	DESC.	1EA	50+EA
5225-BR	50	1A DIP Bridge	$0.39	$0.35
5227-BR	400	1A DIP Bridge	$0.44	$0.39
5228-BR	800	1A DIP Bridge	$0.50	$0.45

1.5A/50V ROUND BRIDGE

1.5 Amp, Wire Leads for PC Board Mtg

WT: .001

STOCK #	DESC.	1EA	50+EA
5230-BR	1.5A 50V Bridge	$0.35	$0.32

40A STUD RECTIFIERS

Silicon stud diodes rated 40A 600PIV. Available. Standard Cathode case or Reverse; Anode Case for ease in heatsinking. Includes 1/4-28 Nut.

WT: .04

STOCK #	DESC.	1+EA
18392-DI	1N1190A 40A Cath. Case Diode	$3.50
18393-DI	1N1190AR 40A Anode Case Diode	$3.50

LOGIC DIODES

General purpose silicon logic diodes at OEM prices.

WT: .05/15 .16/100

STOCK #	DESC.	15+EA	100+EA
1670-DI	1N4148 Diode	$0.06	$0.04
0614-DI	1N914 Diode	$0.05	$0.03

OPTO INTERRUPTER

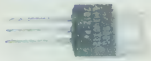
MFG: LITEON
P/N: LTH-301-23
LED: 60mA max 5VDC max reverse volts
OUTPUT TRANSISTOR: 20mAmax /30Vceo max
Ic on state: .4mA @ Vce=5V
CONNECTION: PC Mount
.197" Wide X .30" deep gap, Opto transistor output.

L: .54" H: .39" T: .22" WT: .0015

STOCK #	DESC.	1EA	10EA
18028-OP	Liteon Opto-Interrupter	$0.45	$0.38

VOLTAGE REGULATORS

TO-220 CASE

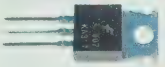


32VDC Max input Voltage
1Amp Output, three terminal regulators

WT: .001

STOCK #	IND. #	OUT V	1EA	25+EA
0359-RG	7805/340-5	+5	$0.50	$0.35
0366-RG	7905	-5	$0.50	$0.35
31223-RG	7806	+6	$0.50	$0.35
31224-RG	7809	+9	$0.50	$0.35
0361-RG	7812	+12	$0.50	$0.35
0367-RG	7912	-12	$0.50	$0.35
0364-RG	7824	+24	$0.50	$0.35

LM-317 ADJ. + VOLTAGE REGULATOR

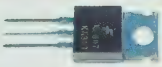


One of the most popular Adjustable regulator of all time. Rated: 3-37VDC input; 1.2-35V adjustable output at 1A.

WT: .05

STOCK #	DESC.	1EA	25+EA
0365-RG	LM317 Adj. Regulator	$0.75	$0.49

LM-337 ADJ. -VOLTAGE REGULATOR

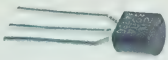


One of the most popular Negative Adjustable regulator of all time. Rated: -3 to -37VDC input; -1.2 to -35V adjustable output at 1.5A.

WT: .05

STOCK #	DESC.	1EA
31191-RG	LM337 Adj. - Regulator	$0.75

TRANSISTOR SPECIAL



General purpose, small signal amplifiers in TO-226 plastic case.

WT: .001

STOCK #	IND. #	1EA	100EA	2000+EA
2030-QT	PN-2222A	$0.25	$0.12	$0.06
2224-QT	2N3906	$0.25	$0.12	$0.06

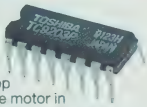
NE555 TIMER IC

Work horse of all timing circuits.
8 Pin Mini DIP.

WT: .001

STOCK #	DESC.	1EA	5+EA
2350-IC	NE555 Timer IC	$0.50	$0.42

PLL MOTOR CONTROL IC



Toshiba TC9203P Phase Lock Loop IC.Designed to control the spindle motor in Floppy Drives. Built in Oscilator, Auto Phase control, Auto Frequency control, many features needed to control motor speed.

WT: .01

STOCK #	DESC.	1EA	25+EA
8381-IC	Toshiba PLL IC	$1.25	$1.00

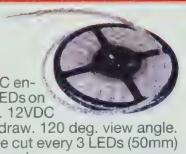
2N3055 POWER TRANSISTOR

General purpose, NPN Power Transistor. 100BVcbo, 60BVceo, 15A Ic Max. TO-204AA (TO-3) case

WT: .04

STOCK #	DESC.	1+EA
31093-QT	2N3055 Transistor	$0.99

5M WHITE LED STRIP

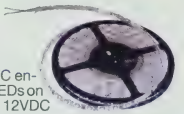


5m long, Water resistant, PVC encapsulated, flexible strip of LEDs on 17mm C/C (300 Total LEDs). 12VDC operation 2.0A max current draw. 120 deg. view angle. 3in. leads on one end. Can be cut every 3 LEDs (50mm)
Individual LED Intensity: 800mcd
Luminous Flux/1m: 660 lumens
Peel-N-Stick Backer. CE/RoHS

L.: 5m **W:** 8mm **T:** 2mm **WT:** .45

STOCK #	DESC.	1SPOOL
19434-OP	5m White LED Flex Strip	$14.95

5M BLUE LED STRIP



5m long, Water resistant, PVC encapsulated, flexible strip of LEDs on 17mm C/C (300 Total LEDs). 12VDC operation 2.0A max current draw. 120 deg. view angle. 3in. leads on one end. Can be cut every 3 LEDs (50mm)
Individual LED Intensity: 350mcd
Luminous Flux/1m: 60 lumens
Peel-N-Stick Backer. CE/RoHS

L: 5m **W:** 8mm **T:** 2mm **WT:** .45

STOCK #	DESC.	1SPOOL
19441-OP	5m Blue LED Flex Strip	$14.95

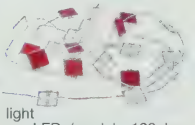
5M RGB LED STRIP

5m long, PVC encapsulated, flexible strip of Tri-color LEDs on 34mm C/C (150 Total LEDs). 12VDC operation, 3.0A max current draw (1A/Color). 120 deg. View angle. 3in. color coded leads with a .1in. header socket on one end.
Can be cut every 3 LEDs (100mm)
Individual LED Intensity: RED :500, BLUE: 220,GREEN: 900mcd
Peel-N-Stick Backer. CE/RoHS

L: 5m **W:** 10mm **T:** 2mm **WT:** .45

STOCK #	DESC.	1SPOOL
31365-OP	5m RGB LED Flex Strip	$14.95

72 LUMEN LED MODULE STRING

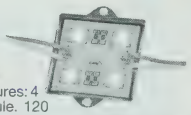


12V, +-.5V DC input Only.

20module string of 72 Lumens/Module White LED light engines featuring: 4 high lumen LEDs/module. 120 deg. beam angle.
Current: 1.6A (80mA)/module) Color Temp:~5000 to 6500
Steel case, Peel-n-stick backer, clear epoxy potting. CE /RoHS
Module:L.: 1-7/16" **W:** 1-3/4" **T:** 3/16"
L: 115" **WT:** .44

STOCK #	DESC.	1EA
19438-OP	20 White 72 lm Light Modules	$49.95

72 LUMEN LED MODULE



12V, +-.5V DC input Only.

White LED light engine features: 4 high lumen LEDs in module. 120 deg. beam angle. Dual 1.5" leads for connecting multiple Modules in parallel. CE /RoHS
Current: 80mA (.080A)/module
Color Temp:~5000 to 6500 72 Lumens/Module
Steel case, Peel-n-stick backer, clear epoxy potting.

L.: 1-7/16" **W:** 1-3/4" **T:** 3/16" **WT:** .025

STOCK #	DESC.	1EA
19445-OP	White 72 lm Light Module	$2.95

12V G-4 BI-PIN LED LAMPS

Bi-pin bulb replacement assembly features: 14 super brite LEDs,12VAC or DC operation, 55deg. beam angle. Replacement for most G-4 lamps. 9mm dia. X 8mm Steel Pins, plastic body.

Dia.: 22.5mm **T:** 11mm **WT:** .009

STOCK #	DESC.	1EA
17352-OP	Red LED Bi-Pin Lamp	$2.95
17353-OP	Green LED Bi-Pin Lamp	$2.95
17354-OP	Amber LED Bi-Pin Lamp	$2.95
17355-OP	Blue LED Bi-Pin Lamp	$2.95

G-4 BI-PIN SOCKET

G-4 socket for Bi-pin bulbs. For use with halogen, standard and LED type lamps. Ceramic body with 2 corner 1/8" holes for mounting. 6in. high temp. leads. 250VAC/25VDC/2A/100W Max. UL/canada/us/VDE/CE

L.: 1-1/16" **W:** 5/8" **T:** 3/8" **WT:** .02

STOCK #	DESC.	1EA
19092-PL	G-4 Bi-Pin Socket	$1.95

36 LUMEN LED MODULE

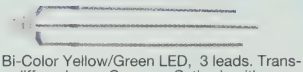
12V, +-.5V DC input Only.

White LED light engine features: 2 high lumen LEDs. 120 deg. beam angle. Dual 1.0" leads for connecting multiple Modules in parallel. CE /RoHS
Current: 40mA (.040A)/module
Color Temp:~5000 to 6500 36Lumens/Module
White Plastic case, Peel-n-stick backer, clear epoxy potting.

L.: 1-7/8" **W:** 5/8" **T:** 3/8" **WT:** .02

STOCK #	DESC.	1EA
31368-OP	White 36 lm Light Module	$2.95

3MM YELLOW/GREEN LED

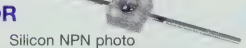


3mm (T1) Bi-Color Yellow/Green LED, 3 leads. Transparent, non-diffused case. Common Cathode with separate Anode for each color. 1" Leads.
Wavelength: Y585/G565nM
Output: 19mcd typ.
Max forward current 20mA continuous.
Forward Drop: Y2.6/G2.5V typ
Max reverse Voltage: 5VDC.

WT: .0001

STOCK #	DESC.	1EA	500+EA
18037-OP	C/C 3mm Bi-Color LED	$0.10	$0.07

I/R PHOTO TRANSISTOR



STANLEY PS5022 Silicon NPN photo transistor in 3.4mm Sq. flat package. Rated: BVceo= 30V, Ic=20mA, Vcesat= 100mV, Max sensitivity wavelength= 880nM, 1/2 angle=+- 20deg, photo current @ 1mW/cm2 @ 880nM= .4mA min/2mA typ. .4" leads.

WT: .001

STOCK #	DESC.	1EA	10+EA
17756-QT	Stanley Phototransistor	$0.19	$0.18

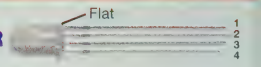
NEAR U/V LED

5mm (T1-3/4) Near Ultra Violet LED, Transparent, non-diffused, Water Clear case. 1" Leads.
Wavelength: 400nM
Output: 80mcd typ.
Max forward current 20mA continuous.
Forward Drop: 3.6V typ
Max reverse Voltage: 5VDC.

WT: .001

STOCK #	DESC.	1EA	10+EA
14143-OP	Near UV LED	$0.29	$0.22

5MM TRI-COLOR LEDS



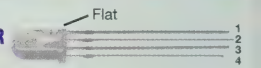
5mm (T1-3/4) Tri-Color Red/Green/Blue LED 4 leads. Transparent, diffused case. Available Common Anode (C/A) with separate Anode lead for each color. 1" leads
Wavelength: R630/G525/B430nM,
Min. output: R200/G300/B150mcd .
Max forward current 20mA continuous.
Max Forward Drop: R2.5/G4.5/B4.5V.
Max reverse Voltage =5VDC.

1: Red
2: Com
3: Blue
4: Green

WT: .001

STOCK #	DESC.	1EA	10+EA
17137-OP	C/A 5mm Tri-Color LED	$0.71	$0.65

5MM TRI-COLOR LEDS



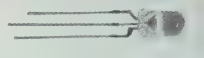
5mm (T1-3/4) Tri-Color Red/Green/Blue LED 4 leads. Transparent, diffused case. Common Cathode (C/C) with separate Anode lead for each color. 1" leads
Wavelength: R630/G525/B430nM,
Min. output: R200/G300/B150mcd .
Max forward current 20mA continuous.
Max Forward Drop: R2.5/G4.5/B4.5V.
Max reverse Voltage =5VDC.

1: Green
2: Com
3: Blue
4: Red

WT: .001

STOCK #	DESC.	1EA	10+EA
18605-OP	C/C 5mm Tri-Color LED	$0.71	$0.65

5MM RED/GREEN LEDS

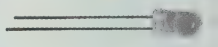


5mm (T1-3/4) Bi-Color Red/Green LED 3 leads. Transparent, diffused case. Common Cathode with separate Anode for each color. 1" Leads.
Wavelength:R635/G570nM
Min. output: R8/G5mcd
Max forward current: 20mA continuous.
Max Forward Drop: R2.5/G2.5V.
Max reverse Voltage: 5VDC.

WT: .001

STOCK #	DESC.	1EA	10+EA
17136-OP	C/C 5mm Bi-Color LED	$0.15	$0.11

5MM RED/GREEN BI-POLAR LEDS

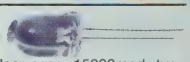


5mm (T1-3/4) Bi-Color, Bi-Polar, Red/Green LED 2 leads. Transparent, diffused case. Red & Green Leds connected in Anti-Parallel.. 1" Leads.
Wavelength: R635/G570nM
Min. output: R8/G5mcd
Max forward current 20mA continuous.
Max Forward Drop: R2.5/G2.5V.
Max reverse Voltage =5VDC.

WT: .001

STOCK #	DESC.	1EA	10+EA
17135-OP	C/C 5mm Bi-Polar LED	$0.15	$0.11

10MM WHITE 15000mcd LED



White, 10mm LED Water clear case. 15000mcd, typ. output. Max forward current 30mA continuous, 20mA recommended. 5VDC Max reverse Voltage. 3.8VDC typ. 4.5V max. Forward voltage drop. 15deg. View angle. 1" leads.

WT: .004

STOCK #	DESC.	1EA	100+EA
15415-OP	10mm WHITE LED	$0.43	$0.30

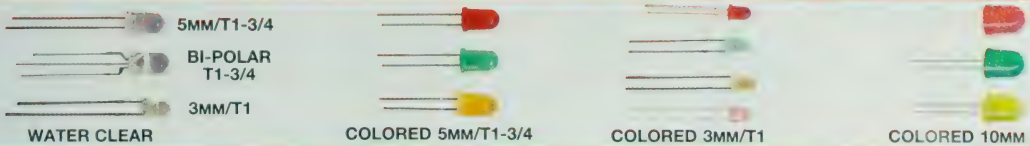
LED SPECIAL

Jumbo diffused red LEDs and mounting clips, rated current= 20mA, max current=30mA, buy your LEDs and get mounting clips for one low price.

Sold in Packs of 10

WT: .001

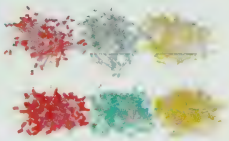
STOCK #	DESC.	1PK	10+PK
1413-OP	LEDs & Holders	$1.75	$1.65



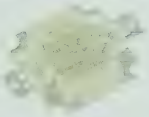
STOCK#	COLOR/WAVELENGTH	INTENSITY	SIZE	CASE	VF	VRev max	IF cont.	WT	1EA	10+EA	100+EA
0206-OP	Red/655nM	.8mcd Typ	3mm/T1	Red Non Diffused	2.0V	5V	20mA	.001	$0.09	$0.07	$0.06
0972-OP	Green/565nM	3mcd Typ	3mm/T1	Green Non Diffused	2.2V	5V	20mA	.001	$0.10	$0.08	$0.07
0973-OP	Yellow/585nM	3mcd Typ	3mm/T1	Yellow Non Diffused	2.1V	5V	20mA	.001	$0.10	$0.08	$0.07
14143-OP	Near UV/400nM	80mcd Typ	5mm/T1-3/4	Water Clear	3.6V	5V	20mA	.001	$0.29	$0.22	$0.20
12568-OP	Blue/470nM	3900mcd Typ	5mm/T1-3/4	Water Clear	4.0V	5V	20mA	.001	$0.34	$0.25	$0.23
17145-OP	White	10000 Typ	5mm/T1-3/4	Water Clear	3.2V	5V	20mA	.001	$0.34	$0.25	$0.23
16798-OP	IR /940nM/20deg.	17mW/sr	5mm/T1-3/4	Water Clear	1.2V	5V	20mA	.001	$0.20	----	----
17139-OP	Red/630nM	690mcd Min	5mm/T1-3/4	Water Clear	2.0V	5V	20mA	.001	$0.18	$0.16	$0.14
11017-OP	Red/630nM	3000mcd Typ	5mm/T1-3/4	Water Clear	2.1V	5V	20mA	.001	$0.29	$0.22	$0.20
15109-OP	Red/635nM	3000mcd Typ	5mm/T1-3/4	Red Non Diffused	2.0V	5V	20mA	.001	$0.25	$0.20	$0.15
17142-OP	YellowGreen/574nM	460mcdmin	5mm/T1-3/4	Water Clear	2.1V	5V	20mA	.001	$0.18	$0.16	$0.14
17143-OP	Pure Green/525nM	5000mcd Min	5mm/T1-3/4	Water Clear	3.4V	5V	20mA	.001	$0.39	$0.30	$0.28
18036-OP	Yellow/585nM	40Typ	5mm/T-1-3/4	Yellow Non Diffused	2.6V	5V	20mA	.001	$0.10	$0.07	$0.05
17141-OP	Yellow/590nM	2000mcd Min	5mm/T1-3/4	Water Clear	2.5V	5V	20mA	.001	$0.18	$0.16	$0.14
0641-OP	Red/700nM	3.2mcd Typ	5mm/T1-3/4	Red Diffused	1.7V	5V	20mA	.001	$0.10	$0.09	$0.08
4085-OP	Green/565nM	5mcd Typ	5mm/T1-3/4	Green Diffused	2.2V	5V	20mA	.001	$0.15	$0.14	$0.12
4086-OP	Yellow/590nM	5mcd Typ	5mm/T1-3/4	Yellow Diffused	2.1V	5V	20mA	.001	$0.15	$0.14	$0.12
18038-OP	Red/Orange/630	19mcd/Typ	5mm/T1-3/4	Red Diffused	2.0V	5V	20mA	.001	$0.10	$0.07	$0.05
18039 OP	Red/Orange/630	20Typ	5mm/T1-3/4	Water Clear	2.0V	5V	20mA	.001	$0.10	$0.07	$0.05
17140-OP	Red/Orange/630nM	1500mcd Min	5mm/T1-3/4	Water Clear	2.1V	5V	20mA	.001	$0.18	$0.16	$0.14
15132-OP	Red/660nM	450mcd Typ	10mm	Red Diffused	1.8V	5V	20mA	.001	$0.25	$0.20	$0.15
15133-OP	Green/568nM	300mcd Typ	10mm	Green Diffused	2.2V	5V	20mA	.001	$0.30	$0.25	$0.20
15134-OP	Yellow/590nM	600mcd Typ	10mm	Yellow Diffused	2.1V	5V	20mA	.001	$0.30	$0.25	$0.20

BULK PACK LEDS 100PCS/PACK

STOCK#	COLOR/WAVELENGTH	INTENSITY	SIZE	CASE	VF	VRev max	IF cont.	WT	1PKG
15101-OP	Red/635nM	20mcd Typ	3mm	Red Diffused	1.8V	5V	20mA	.04	$1.95
15102-OP	Green/568nM	10mcd Typ	3mm	Green Diffused	2.2V	5V	20mA	.04	$1.95
15103-OP	Yellow/590nM	10mcd Typ	3mm	Yellow Diffused	2.1V	5V	20mA	.04	$1.95
15104-OP	Blue/470nm	700mcd Typ	3mm	Blue Diffused	3.8V	5V	20mA	.04	
15108-OP	Red/635nM	50 mcd Typ	5mm	Red Diffused	1.8V	5V	20mA	.05	$1.95
15307-OP	White	4000/Min	5mm	White Diffused	3.0	5V	20ma	.05	
15308-OP	Green/568nM	5mcd Typ	5mm	Green Diffused	2.2V	5V	20mA	.05	$1.95
15309-OP	Yellow/590nM	5mcd Typ	5mm	Yellow Diffused	2.1V	5V	20mA	.05	$1.95
31363-OP	Blue/470nm	20mcd Typ	5mm	Blue Diffused	2.7V	5V	20mA	.05	$3.50



10 WATT LEDS



REQUIRES HEATSINKING & CURRENT LIMITING
Case Temp. <45C max.
10W High Brightness
5V max Reverse Voltage.
Forward Current 900mA max
160deg. View angle.
RED: Output: 350 lm,620-625nM
Forward Voltage Drop: 6.7-6.8VDC
GREEN: Output: 600 lm, 520-525nM
Forward Voltage Drop: 10-11VDC
BLUE: Output: 200 lm, 460-465nM Blue LEDs.
RGB: Color COMMON ANODE
Wavelength: R625/G525/B460nM,
Min. Output: RGB: 350lm, each LED R80/G150/B30lm
Max Forward current: 350mA continuous Single Color
Max Forward current: 1000mA total 3 colors
Forward Drop: R6-7V/G10-11V/B10-11V.
Max reverse Voltage: 15VDC
ALUMINUM BASE SURFACE MOUNT PACKAGE
Sq: 20mm **H:** 3.5mm **WT:** .011

STOCK #	DESC.	1EA
31515-OP	Red 10W LED	$3.95
31516-OP	Green10W LED	$3.95
31517-OP	Blue 10W LED	$2.95
31518-OP	RGB 10W LED	$3.95

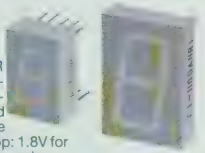
THOUSANDS more items on www.mpja.com

1W STAR LEDS

REQUIRES HEATSINKING
High Brightness 1Watt LEDs.
Max forward current 350mA continuous.
5V max Reverse Voltage. 120deg. View angle.
Red 50lm, 620-630nm, 2.1VDC Typical Forward voltage
White 90lm, 6000-6500K, 3.4VDC Typical Forward voltage
Blue 20lm, 460-465nm, 3.4VDC Typical Forward voltage
SURFACE MOUNT PACKAGE
Dia: 20mm **H:** 6.8mm **WT:** .003

STOCK #	DESC.	1EA
19610-OP	1W SMD Red 50lm LED	$1.95
19585-OP	1W SMD White 90lm LED	$1.95
19586-OP	1W SMD Blue 20lm LED	$1.95

7 SEGMENT DISPLAYS

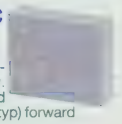


Red, Common Anode OR Common Cathode 7 segment display. 660nm, 3-4.5mcd,20mA max forward current, 5V max reverse voltage. Typ. Forward Drop: 1.8V for .5in. /3.6V for 1". Gray face color

WT: .02

STOCK #	DESC.	1EA	10+EA
15118-OP	.5" Com. Anode Display	$1.30	$1.09
15119-OP	.5" Com. Cath. Display	$1.30	$1.09
15120-OP	1" Com. Anode Display	$0.95	$0.89
15121-OP	1" Com. Cath. Display	$0.95	$0.89

DUAL ALPHA-NUMERIC DISPLAYS



Dual. .54" Red, Common Anode OR Common Cathode, 16 Segment display. 660nm, 2.5-5 mcd, 20mA max forward current, 5V max reverse voltage, 1.8V (typ) forward drop. Gray face color

WT: .02

STOCK #	DESC.	1EA	10+EA
15128-OP	.54" Com. Anode Alpha.	$1.95	$1.49
15129-OP	.54" Com. Cath. Alpha.	$1.95	$1.49

4" DOT MATRIX DISPLAY

Red, AlGaAs, Anode Row, Cathode Column, 5 X 7 Dot Matrix display. 660nm, 10000 mcd, 100mA max, 20mA typ. forward current, 10V max reverse voltage, 4.8V (typ) forward drop. Black face color, Edge Stackable.

WT: .22

STOCK #	DESC.	1EA
18460-OP	4" Red 5X7 Dot Matrix Display	$7.95

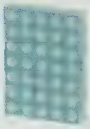
5MM LED MOUNTING CLIPS

Two part black plastic mounting clips for 5mm/.200" LEDs, use to panel mount LEDs

WT: .001

STOCK #	DESC.	1EA	200+EA
0207-OP	Black LED Mtg. Clips	$0.10	$0.09

2" 5 X7 RED LED MATRIX



Red, Anode Column OR Cathode Column, 5 X 7 Dot Matrix display. 660nm, 5-9 mcd, 20mA max forward current, 5V max reverse voltage, 1.8V (typ) forward drop. Gray face color

WT: .02

STOCK #	DESC.	1EA	10+EA
15124-OP	2" Col. Cathode Dot Matrix	$2.95	$2.50
15125-OP	2" Col. Anode Dot Matrix	$2.95	$2.50

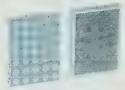
5 X 7 RED & GREEN LED MATRIX

Liteon LTP-2757AA LED Matrix.
Connected Anode Column/Cathode Row
Fwd current/Dot: 100mA max/13mA Ave
Max reverse Volts: 5V
Fwd. Drop: 2.6V @ 20ma Max
2.1V Green 2.0V Red Typ.
Two color: red/orange (630nM) & Green (565nM) in separate Row/column matrix.
2in height, stackable horizontally. DATA

H: 2" **W:** 1-1/2" **WT:** .05

STOCK #	DESC.	1EA	12EA
16784-OP	5X7 LED Matrix	$5.95	$4.95

5 X 7 GREEN LED MATRIX

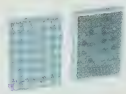


Liteon LTP-2057AG
565nm Green LED Matrix.
Connected Anode Column/Cathode Row
Fwd current/Dot: 100mA max. 13mA Ave
Max reverse Volts: 5V
Fwd. Drop: 2.6V @ 20ma Max/ 2.1V Typ.
2in height, stackable horizontally. DATA

H: 2" **W:** 1-1/2" **WT:** .05

STOCK #	DESC.	1EA	25EA
16786-OP	5X7 Green LED Matrix	$3.95	$2.95

5 X 7 ORANGE LED MATRIX



Liteon LTP-2057AE
630nm Orange LED Matrix.
Connected Anode Column/Cathode Row
Fwd current/Dot: 100mA max. 13mA Ave
Max reverse Volts: 5V
Fwd. Drop: 2.6V @ 20ma Max/ 2.1V Typ.
2in height, stackable horizontally. DATA

H: 2" **W:** 1-1/2" **WT:** .05

STOCK #	DESC.	1EA	25EA
16794-OP	5X7 Orange LED Matrix	$3.95	$2.95

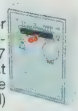
5 X 7 RED & GREEN LED MATRIX

Liteon LTP-2N57M LED Matrix.
Connected Anode Row/Cathode Column
Fwd current/Dot: 100mA max/13mA Ave
Max reverse Volts: 5V
Fwd. Drop: 2.6V @ 20ma Max 2.1V Green 2.0V Red Typ.
Two color: red/orange (630nM) & Green (565nM) in separate Row/column matrix.
2in height, stackable horizontally. DATA

H: 2" **W:** 1-1/2" **WT:** .05

STOCK #	DESC.	1EA	12EA
18459-OP	5X7 LED Matrix	$3.50	$2.95

LED TESTER



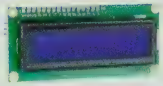
Compact, pocket sized checker/comparator for LEDs. 12 position test socket strip provides test currents of 2,5, 10,20,30 & 50mA. 7 center positions provide 10mA test current allowing you to compare several LED at the same time. Requires 9V battery (not supplied)

H: 3-1/8" **W:** 2-3/8" **T:** 7/8" **WT:** .1

STOCK #	DESC.	1EA	5+EA
14371-TE	LED Tester	$6.95	$5.95

SECURE
ON-LINE ORDERING www.mpja.com

SERIAL 2 X 16 LCD

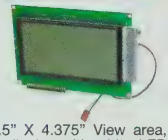


Serial LCD for Arduino
LCM1602 IIC V1 Serial Board LCD for UNO, MEGA & Duemilanove. The I2C/SPI communication with microcontroller does not take a Shield position, simple 4 wire connection. LCD features: 16 character by 2 line LCD module (Hitachi 44780 compatible), dark blue back ground, white characters and White LED backlighting. Power LED.
Power: +5 volts (supplied by Arduino)
Character size: 2.95mm X 5.15mm
Dot Size: 0.55mm x 0.60mm
I/O: 4 pin header 0.1in Pitch

L: 3-1/8" **W:** 1-7/16" **H:** 7/8 O/A **WT:** .1

STOCK #	DESC.	1EA
31164-MP	2X16 Serial LCD Arduino	$9.95

240 X 128 DISPLAY

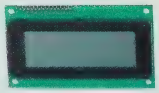


MFG: HANTRONIX
P/M: HDM128GS24
Resolution: 240X128
Dot Size: .4 X .4mm
Dot Pitch: .45mm
Specifications/Features: 2.5" X 4.375" View area, Transflective type Dot Matrix display with white LED Backlight. Built in Toshiba T6963 controller. Requires single +5V supply. 20Pin right angle header for Data 8in leads for Backlight.

L: 6" **W:** 4-1/2" O/A **T:** 1/2" **WT:**.5

STOCK #	DESC.	1EA
31003-OP	240 X 128 LCD Display	$19.95

20 X 4 LINE LCD DISPLAY

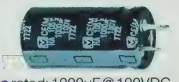


MFG: TIANMA
P/M: TM204JAA7-1
Resolution: 4 Lines X 20 Char.
Char. Size: 2.35 X 4.03mm
Char. Pitch: .43mm
Specifications/Features: 5 X 7 + cursor Reflective type Dot Matrix display with built in controller (KS0066) & drivers. Requires single +5V for logic and LCD drive.

L: 3" **W:** 1-7/8" **T:** 3/8" **WT:**.08

STOCK #	DESC.	1EA
19243-OP	20 X 4 TIANMA LCD Display	$7.95

FILTER CAP



P.C Mount electrolytic Filter cap rated: 1000uF @ 100VDC. P.C. Mount Snap-in pins. For power supplies, Amps etc.

Dia: 13/16" **H:** 1-9/16" **WT:** .04

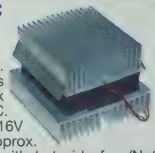
STOCK #	DESC.	1EA	300EA
18070-CR	1000uF Filter Cap	$1.25	$0.99

MONO CERAMIC CAPS

These small size monolythic ceramic caps are ideal for bypassing, filtering etc.
Rated 50V.
+-20% Tol.

STOCK #	VAL.	SPACE	1EA	10+EA	100+EA	1000+EA
5625-CM	10p	.1	$0.22	$0.12	$0.09	$0.06
5626-CM	15p	.1	.22	.12	.09	.06
5627-CM	22p	.1	.22	.12	.09	.06
5628-CM	39p	.1	.22	.12	.09	.06
5630-CM	68p	.1	.22	.12	.09	.06
5632-CM	220p	.1	.22	.12	.09	.06
5633-CM	330p	.1	.22	.12	.09	.06
5634-CM	470p	.1	.22	.12	.09	.06
5636-CM	1000p	.1	.37	.19	.15	.10
5637-CM	2200p	.1	.22	.12	.09	.06
5638-CM	3300p	.1	.22	.12	.09	.06
5639-CM	4700p	.1	.22	.12	.09	.06
5640-CM	6800p	.1	.22	.12	.09	.06
5643-CM	.033u	.1	.23	.12	.09	.06

THERMOELECTRIC ASSEMBLY



Peltier Effect cooling assembly. Contains module with 127 Pairs of couples mounted to a heatsink assembly. Optimized for 12VDC. 65-70W (~170 BTU). 8A max, 16V max, Draws 6A @ 12VDC. Approx. 50Deg "C" temp. difference with hot side fan (Not included) and insulated cold side. Designed for recreational coolers.

L: 5" **W:** 5-1/8" **T:** 3-3/4" **WT:** 2.6

STOCK #	DESC.	1EA	2+EA
15312-PM	Peltier Cooler Unit	$29.95	$27.95

12V THERMOELECTRIC COOLING MODULES

127 couple, edge sealed Peltier cooling modules optimized for 12VDC. ~90 BTU heat pumping possible. 6A max, 16V max, Draws 4.4A@ 12VDC. 10in. Leads

L: 1-9/16" **W:** 1-9/16" **T:** .15 **WT:** .05

STOCK #	DESC.	1EA
30207-PM	12V 50-60W Peltier Module	$4.98

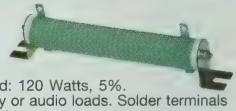
SNAP-ON NOISE FILTERS

Fair-Rite P/N 0443167281ferrite snap-on filters. Plastic case with type 44 split core material. Clamps around cable up to .4in Dia. and blocks noise. Frequencies from 30MHz to500MHz. Permeability=500, impedance: 125 @ 25MHz/210 @ 100MHz

L: 1.55" **W:** .94" **H:** .94" **WT:** .08

STOCK #	DESC.	1EA	25+EA
17842-FL	.4" Clam Noise Filter	$2.49	$1.95

120 WATT RESISTORS



Power resistors rated: 120 Watts, 5%.
Use for power supply or audio loads. Solder terminals and steel Mtg. brackets

L: 8-1/2 " **W:** 1-1/4" **H:** 2-1/2" O/A **WT:** .5

STOCK #	DESC.	1EA	50+EA
17785-RS	1 Ohm 120W Resistor	$5.95	$4.95
17786-RS	2 Ohm 120W Resistor	$5.95	$4.95
17787-RS	4 Ohm 120W Resistor	$6.95	$5.95
17788-RS	8 Ohm 120W Resistor	$6.95	$5.95
17789-RS	16 Ohm 120W Resistor	$6.95	$5.95

POWER BLOCK RESISTORS

Ceramic Block, Wirewound Power resistors rated: 5%. Use for shunts, ballast resistors etc. 1-1/4" leads

L: 5W 7/8" 10W 1-7/8" **W:** 3/8" **H:** 3/8" **WT:** .01/.022

STOCK #	DESC.	1EA	100+EA
17790-RS	0.1 Ohm 5W Resistor	$0.35	$0.29
17791-RS	1.0 Ohm 5W Resistor	$0.35	$0.29
30026-RS	1.0 Ohm 10W Resistor	$0.45	$0.39

5K SLIDE POT

Mini audio taper 5K, PC mount Slide Pot. 3/8" long actuator.

L: 1-3/16" **W:** 9/32" **H:** 9/32"+ Actuator **WT:** .005

STOCK #	DESC.	1EA
19142-VR	5K Audio Slide Pot	$0.50

BE TO VISIT OUR WEBWITE AT WWW.MPJA.COM TO SEE MANY MORE ITEMS AVAILABLE

- Actuators
  - Air 42,Web
  - Linear 39,41
- Air
  - Cylinders 42,Web
- Amplifiers
  - Video ..... Web
- Annunciators ..... Web

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LB	ZONE 2	3	4	5	6	7	8
1	10.37	10.84	11.05	11.39	11.76	11.87	12.01
2	10.98	11.48	12.16	12.35	12.82	12.94	13.28
3	11.10	11.84	12.61	12.90	13.39	13.62	14.32
4	11.28	12.06	13.08	13.52	13.91	14.30	15.12
5	11.50	12.16	13.46	13.93	14.29	14.76	15.74
6	11.70	12.42	13.62	14.17	14.50	15.10	16.02
7	12.08	12.66	13.80	14.42	14.81	15.41	16.38
8	12.41	12.89	14.08	14.63	15.16	15.80	17.02
9	12.59	13.12	14.23	14.82	15.41	16.45	17.87
10	12.89	13.15	14.40	15.14	15.90	17.35	18.83
11	13.21	13.55	14.50	15.23	16.20	18.24	19.74

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At our option, any defective product will be repaired or replaced within the warranty period by the same or substantially similar product or a refund will be issued.
A return form is provided in your package, no need to call. Items must be complete, in original condition & packaging, including Manuals, cables, screws etc. **Internal manufacturer's packaging/boxes must be undamaged.** Returns not meeting these requirements will not be accepted. Pack carefully then ship freight paid (No COD).

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Orders shipped within Florida must pay Florida Sales Tax, unless we have a signed Florida Blanket Certificate of Resale on file before the sale. If you are required to pay sales tax in your state, that is your responsibility.

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ZIP	ZONE
004-005	6
010-046	6
047	7
048-076	6
077-078	5
079	6
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100-149	6
150-163	5
164-165	6
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289-299	4
300-306	6
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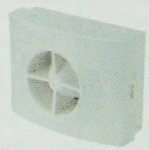


Honeywell WAVE-2, 6-14VDC self contained siren produces standard Warble or high pitch Tone. Rated 106db at 12VDC @ .5A. White plastic body mounts on single gang box or to wall. Internal termal strip, NO Tamper loop. For indoor use. UL/CE listed

H: 4-5/16" **W:** 3-1/4" **D:** 2" **WT:** .6

STOCK #	DESC.	1EA
30118-SU	12VDC Siren Dual Tone	$5.95

12VDC SPDT RELAY

MORE PGS 28,29

MFG: TYCO
P/N: VF4-13
COIL: 12VDC/90 ohms
CONTACTS: SPDT
CONTACT RATING: N.O.: 40A/ **N.C.:** 30A@14VDC
General purpose, Automotive relay with 5 terminals for PCB Mounting.

SQ: 1" **H:** 1 Body **WT:** .06

STOCK #	DESC.	1EA
31840-RL	12VDC SPDT Relay	$0.99

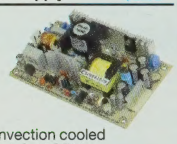
12V @ 3A SUPPLY

MFG: LEADER
P/N: NU30-4120250-I3
Input: 100-240 VAC 50/60Hz
Output: 12VDC @ 3A
Specifications/Features: Switching Adapter supply with overvoltage & current limit protection. Non-Polarized 2 wire IEC Type 2-C8 input connector. 5ft output cord with 10mm L. X 5.5mm/2.1mm ID Right Angle coaxial plug Center +. CE listed. Includes Power Cord

L: 4-1/4" **W:** 1-3/4" **D:**1-1/4" **WT:** .62

STOCK #	DESC.	1EA
31870-PS	12V @ 3A Leader Supply	$6.95

15V @ 3A SUPPLY



MORE PGS 14-22

MFG: MEANWELL
P/N: PS-45-15
Input: 100-240VAC 50-60Hz
Output: 15VDC @ 3A 45W Convection cooled
52W maxFan cooled @ 18CFM
Specifications/Features: Open frame Switching power supply. 1% line/2.0% load Regulation. Over Voltage & Current protected. Header Pins in & out. UL/us/canada/TUV/CE Listed.

L: 5" **W:** 3" **T:** 1-1/2" **WT:** .4

STOCK #	DESC.	1EA
31506-PS	15V @ 3A Meanwell Supply	$12.95

24VAC DPST-NO RELAY

MORE PGS 28,29

MFG: ZETTLER
P/N: XMCK-302024C
COIL: 24VAC/ 12 ohms
CONTACT RATING:
240/277VAC: 25AFLA/150LRA/30A Res.
480VAC:25FLA/125LRA/30A Res.
ACTION: DPST-NO
Panel Mount HVAC Contactor (relay). Quick connect terminals. UL/us/canada/CE listed.

L: 3-1/2" **W:** 2-1/8" **H:** 2-5/8" **WT:** .65

STOCK #	DESC.	1EA
31821-RL	24VAC DPST-NO Contactor	$12.95

NEAR FIELD EMF METER

Handheld wide band Microwave Field strength meter. Designed to detect and measure fields eminated from Cell base stations & phones, Microwave ovens & equipment, WiFi links and other nearfield RF equipment found in the Lab, Office or Home.
Display: 3.5digit LCD
Bandwidth: 50MHz-3700MHz
Range: 0.1μW/cm²-100.9μW/cm²
Accuracy: 0.1μW/cm²
Alarm Threshold: 20.0μW/cm²
Alarm Indicator: LED Panel Lamp
Sample Time: <0.3sec.
Operating Temp: -15C° to +60C°
Power: 9V Battery (6F22)
CE Listed

H: 1-1/2" **W:** 2-3/4" **T:** 1-1/4" **WT:** .52

STOCK #	DESC.	1EA
31860-TE	Microwave EMF Meter	$149.95

STAGING CLAMP

USED Vise type clamp used to hold signs, reflectors, lights and other rigging on pipe or pipe to tooling. Aluminum body with 2" EZ grip knob, steel bolt & platen. Max open clearance: 1-1/2". Max Pipe Dia: 1-1/4". Removable 3" X 2-3/4" 4 hole plate.

L: 4-1/4"O/A **W:** 3" **H:** 3" **WT:** .62

STOCK #	DESC.	1EA
19377-MI	Black Staging Clamp	$1.99

GOT AN UNUSUAL USE FOR THIS CLAMP?? EMAIL US A PICTURE WE'LL POST SOME ON OUR WEBSITE

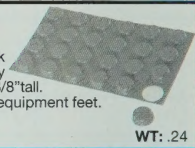
12V @ 5A SUPPLY

MFG: DELTA
P/N: EADP-48FB-A
Input: 100-240 VAC 50-60Hz
Output: 12VDC @ 5A
Specifications/Features: Switching adapter supply with overvoltage & current limit protection. Non-polarized 2 wire IEC Type 2-C8 input connector. 5ft output cord with 10mm X 5.5/2.5mm ID coaxial plug Center +. TUV/CE listed. Power Cord included

L: 5" **W:** 2" **T:** 1-1/4" **WT:** .64

STOCK #	DESC.	1EA
31869-PS	12V @ 5A Leader Supply	$9.95

RUBBER FEET



3M P/N SJ6316 peel n stick rubber feet. Sheet of 24 Gray bumpers 7/8" in diameter X 3/8" tall. Ideal as shock absorbers, equipment feet.
Sold as Sheet of 24 Only

Dia: 7/8" **HT:** 3/8" **WT:** .24

STOCK #	DESC.	1EA
31471-BU	Sheet of 24Rubber Bumpers	$3.50

DID YOU MISS OUR PROMOTIONS?

Here are some of our previous EMAIL ONLY PROMOTIONS

Sign up at www.mpja.com to receive our Weekly Email Specials and take advantage of these promotions.

You can remove yourself from this emailing any time you wish and your email is always private!

FREE GIFT PROMO
$14.95 VALUE
With your $100.00* Purchase, receive a FREE
FREE GIFT PROMO
$5.95 VALUE
You MUST enter ES-PR56 in your shopping cart
With your $50.00* Purchase, receive a FREE 30VDC Snap-in Red 3 Digit Mini Panel Meter
FREE GIFT PROMO
$6.95 VALUE
You MUST enter ES-PR46 in your shopping cart
FREE GIFT PROMOTION
You MUST enter ES-PR4 in your shopping cart
$14.95 VALUE
With your $100.00* Purchase, receive a FREE Mini Solder Station
FREE GIFT PROMOTION
You MUST enter ES-PR9 in your shopping cart
With your $100.00* Purchase, receive a FREE Handheld I/R Thermometer
$24.95 VALUE
FREE GIFT PROMOTION
You MUST enter ES-PR5 in your shopping cart
With your $150.00* Purchase, receive a FREE 200A Clamp On Ammeter
$69.95 VALUE
FREE GIFT PROMOTION
You MUST enter ES-PR3 in your shopping cart
With your $50.00* Purchase receive a FREE 830 Tie Point Breadboard with Terminal Strip
$9.99 VALUE
FREE GIFT PROMOTION
With your $50.00* Purchase
FREE Telescoping inspection Mirror
$9.95 VALUE
*Before shipping & non-back ordered items. Supplies Limited.